

STIC Search Report

STIC Database Tracking Number: 156547

TO: Brian Le

Location: Knox 9A54

Art Unit: 2623

Thursday, June 16, 2005

Case Serial Number: 10607184

From: Pamela Reynolds

Location: EIC 2600

KNOX 8B54

Phone: 571-272-3505

Pamela.Reynolds@uspto.gov

Search Notes

Dear Brian Le, ·

Please find attached the search results for 10607184. I used the search strategy we discussed. I searched the standard Dialog files, and the internet.

If you would like a re-focus please let me know.

Thank you.



		W 4
السدا	YAYA	70
	S AY B	18

Questions about the scope or the results of the search? Contact the EIC searcher or contact:

Pamela Reynolds, EIC 2600 Team Leader 571-272-3505, Knox 8B59

Voluntary Results Feedback Form
> I am an examiner in Workgroup: Example: 2663
> Relevant prior art found , search results used as follows:
☐ 102 rejection
103 rejection
Cited as being of interest.
Helped examiner better understand the invention.
Helped examiner better understand the state of the art in their technology.
Types of relevant prior art found:
☐ Foreign Patent(s)
 Non-Patent Literature (journal articles, conference proceedings, new product announcements etc.)
> Relevant prior art not found:
Results verified the lack of relevant prior art (helped determine patentability).
Results were not useful in determining patentability or understanding the invention.
Comments:

Drop off or send completed forms to STIC/EIC2600 Knox 8B59



54 RvsH

158547

Access DB#

SEARCH REQUEST FORM

Scientific and Technical Information Center

. 0	0.		
Requester's Full Name Sha	in le @	Examiner #: 79178 Date: 6-15-04	
Art Unit: 2623 Phone Numb	per_7-747.4	Serial Number: 10 CO 7184	
Location:Results	Format Preferred (circle	Serial Number: 10607184 PAPER DISK E-MAIL	
If more than one search is submi	•	·	
If more than one search is submi	itted, please prioritize	searches in order of need.	
Please provide a detailed statement of the s	earch tonic and describe as	**************************************	
species of structures, keywords, synonyms,	actonyms: and registry num	bers-and combine with the concept or utility of the joyantia by a	
terms that may have a special meaning. Or	ve examples or relevant citati	ions, authors, etc, if known. Please attach a copy of the cover sheet, per	1.
claims, and abstract.			
Title of Invention:			
Inventors (please provide full names):	·		
		• .	
Earliest Priority Filing Date:			
*For Sequence Searches Only * Please include a	 All pertinent information (parent	t, child, divisional, or issued patent numbers) along with the appropriate seri	
namber.	•		-
^	•		
Genstr	(12-21-2001	
• •		1/ - 01	
•			
·		•	
	•		
	•		
*****	***********	********	
STAFF USE ONLY	Type of Search	Yendors and cost where applicable	
Searcher: Ming mld.	Sequence (#)	SIN	
Searcher Mione #: 272-31VT	AA Sequence (#)	Dialog	
Searcher Location:	Structure (#)	Questel/Orbit	
Date Searcher Picked Up: 615-15	Bibliographic	Dr.Link	
Date Completed: 07605	Litigation'	Lexis/Nexis	
Searcher Prep & Review Time:	Fulltext	Sequence Systems	
Clerical Prep Time:	Patent Family	WWW/Internet	
Outine Time: \W	Other	Other (specify)	

```
File 344: Chinese Patents Abs. Aug 1985-2005/May
         (c) 2005 European Patent Office
File 347: JAPIO Nov 1976-2005/Feb (Updated 050606)
         (c) 2005 JPO & JAPIO
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200537
         (c) 2005 Thomson Derwent
Set
        Items
                Description
                GEMSTONE? OR GEMS OR AMYTHEST OR DIAMOND??
S1
        41371
                 (LOCAT? OR IDENTIF? OR FIND? OR READING OR READS) (3N) (INFO-
S2
       101488
             RMATION OR INDICIA OR INDICIUM)
                MANUFACTURER OR OWNER OR RETAILER OR SELLER?? OR PRODUCER?
S3
        75761
             OR MINE OR COUNTRY (2N) ORIGIN OR BRAND () NAME
                NUMBER OR ID OR (IDENTIFICATION OR CERTIFICATION) () NUMBER??
S4
      1564161
                LOGO OR SYMBOLS OR DESIGN? OR ALPHANUMERIC OR DATES OR MES-
S5
       787268
             SAGES
       124691
                COORDINATE? OR XY
S6
                 (AUTHENTICAT? OR CERTIF?) AND S1
S7
           33
                 (PURITY OR QUALITY OR TYPE) AND S1
S8
         6411
                 (S1 OR S2) (3N) (SCANNING OR SCANNER OR LASER?)
S9
         1589
                NEAR() FIELD() OPTIC?? OR OPTIC?
S10
      1189761
                 (ETCH? OR MARKING OR MARKS OR MARKED OR INSCRIB?) AND S1 A-
          198
S11
             ND (S3 OR S4 OR S5)
            0
                MICROSCOPIC (3N) S11
$12
                AU=(PATTON D? OR SPOONHOWER J? OR PATTON, D? OR SPOONHOWER,
S13
          347
              J?)
         2499
                MICROMACHIN?
S14
                S7 AND (S3 OR S4 OR S5)
S15
            9
                (S8 OR S9) AND S10
S16
         1063
           52
                S16 AND S5
S17
                S17 AND LASER??
           25
S18
                S18 AND S4
            3
S19
            3
                S19 NOT S15
S20
           56
                S11 AND (S10 OR LASER?? OR S14)
S21
           29 S21 NOT PY=>2002
S22
```

15/3,K/1 (Item 1 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2005 JPO & JAPIO. All rts. reserv.

08197431 **Image available**
DIAMOND WITH CERTIFICATE

PUB. NO.: 2004-310191 [JP 2004310191 A] PUBLISHED: November 04, 2004 (20041104)

INVENTOR(s): MATSUMOTO TAKUYA APPLICANT(s): TWINSHIP JAPAN KK

APPL. NO.: 2003-099259 [JP 200399259] FILED: April 02, 2003 (20030402)

DIAMOND WITH CERTIFICATE

ABSTRACT

PROBLEM TO BE SOLVED: To diversify the value of a diamond from the standpoint that one keeps a diamond carefully for a long period of time and usually wears it without hiding it in a safe.

SOLUTION: A certificate 10 certifying the identity of a crude diamond is attached to each of a plurality of diamonds obtained by dividing the crude diamond, and each diamond 1 is given an ID 2. The diamonds each are identified with the ID in the certificate.

COPYRIGHT: (C) 2005, JPO&NCIPI

15/3,K/2 (Item 2 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2005 JPO & JAPIO. All rts. reserv.

07974069 **Image available**

BUSINESS MODEL FOR QUALITY CERTIFICATION AND ANTITHEFT SYSTEM FOR JEWEL

PUB. NO.: 2004-086828 [JP 2004086828 A]

PUBLISHED: March 18, 2004 (20040318)

INVENTOR(s): OUCHI KAZUMI

SAITO TADAAKI

APPLICANT(s): OUCHI KAZUMI

APPL. NO.: 2002-289233 [JP 2002289233] FILED: August 27, 2002 (20020827)

BUSINESS MODEL FOR QUALITY CERTIFICATION AND ANTITHEFT SYSTEM FOR JEWEL

ABSTRACT

PROBLEM TO BE SOLVED: To enable police investigation and return to a legitimate **owner**, based on a mark incused on a gem even, when it is taken down to...

... dimensional bar code, own fingerprint, and the like) are incused on a surface of a diamond by a laser beam. The marks incused on each of the diamonds enable quality, polishing completion data and the legitimate owner to be searched on line by reading the marks with a mark reader when required...

15/3,K/3 (Item 3 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2005 JPO & JAPIO. All rts. reserv.

00711831 **Image available**

METHOD FOR MAKING PHOTOGRAPHING FOR DECIDING IDENTITY OF DIAMOND

PUB. NO.: 56-032131 [JP 56032131 A] PUBLISHED: April 01, 1981 (19810401)

INVENTOR(s): GUNJIKAKE KIYOSHI

APPLICANT(s): GUNJIKAKE KIYOSHI [000000] (An Individual), JP (Japan)

APPL. NO.: 54-107807 [JP 79107807] FILED: August 24, 1979 (19790824)

JOURNAL: Section: P, Section No. 64, Vol. 05, No. 84, Pg. 138, June

02, 1981 (19810602)

METHOD FOR MAKING PHOTOGRAPHING FOR DECIDING IDENTITY OF DIAMOND

ABSTRACT

... picture of the polishing traces that have been produced at the final polishing of a **diamond** and cannot be erased thereby making a photograph for deciding identity...

...CONSTITUTION: The polishing traces la... which are produced in a diamond 1 at its final polishing and cannot be erased are magnified to the extent of...

... positive photograph 4 of a predetermined size by this photographing is beforehand affixed to a **certificate** 3, the identity of the **diamond** may be decided without making examination at every time, even when the **owner** of the **diamond** 1 changes.

15/3,K/4 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

XRPX Acc No: N05-113804

Diamond pod for jewelry, has octahedral precious metal filigree cage accommodating free moving natural diamond crystal

Patent Assignee: WATERFALL PARK ESTATE PTY LTD (WATE-N)

Inventor: BLAIR L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week AU 2004100945 A4 20041209 AU 2004100945 A 20041109 200515 B

Priority Applications (No Type Date): AU 2004100945 A 20041109

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

AU 2004100945 A4 14 A44C-017/02

Diamond pod for jewelry, has octahedral precious metal filigree cage accommodating free moving natural diamond crystal

Abstract (Basic):

... cage fitted with a precious metal annual feature (1). The cage accommodates free moving natural diamond crystal. The outer filigree

pattern design reflects the structural trigon feature of natural diamond and avoids freely movably diamond crystal to pass through. The natural diamond crystal has a unique laser inscribed number matching the number on the authentication certificate.

the design of the outer pod allows a secure way of protecting the diamond crystal while the filigree design allows any potential energy to easily pass through to the wearer. Ensures that diamond crystal is legally purchased. The top and bottom octahedral points of the cage have a...

- ...jewelry by people with minimal jewelry making skills. The decorative box or packaging allows the **diamond** pod and **certificate** to be easily supplied and stored together...
- ...The figures show octahedral shape and filigree patterns from four angles, natural diamond crystals, and examples of laser inscribed number matching on authentication certificate.

Title Terms: DIAMOND;

15/3,K/5 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.

016611583 **Image available**

WPI Acc No: 2004-770317/200476

XRPX Acc No: N04-607840

Diamond with certificate has identification name specification for each diamond that is obtained by dividing single raw ore

Patent Assignee: TWINSHIP JAPAN KK (TWIN-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 2004310191 A 20041104 JP 200399259 A 20030402 200476 B

Priority Applications (No Type Date): JP 200399259 A 20030402 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes JP 2004310191 A 6 G05B-019/418

Diamond with certificate has identification name specification for each diamond that is obtained by dividing single raw ore

Abstract (Basic):

... An identification (ID) (2) name is provided to each diamond (1) that is obtained by dividing a single raw ore. The diamond along with ID is specified in a certificate (10) and stored in a database.

.. Diamond with certificate .

 \dots disaster or war devastation is obtained, by accessing the file of common raw ore of ${\tt diamond}$.

... The figure shows a top view of the diamond certificate . (Drawing includes non-English language text...

... diamond (1...

. . .

... ID (2... ... certificate (10 Title Terms: DIAMOND ; (Item 3 from file: 350) 15/3,K/6 DIALOG(R) File 350: Derwent WPIX (c) 2005 Thomson Derwent. All rts. reserv. 015773893

WPI Acc No: 2003-836095/200378

XRAM Acc No: C03-235123

Labeling an article with at least two oligomers that bind to a third substance in the presence of non-binding oligomers is useful to authenticate unique or valuable articles such as works of art, diamonds and jewelry

Patent Assignee: GERSAN ESTAB (GERS-N)

Inventor: SLATER J H; SMITH M P

Number of Countries: 001 Number of Patents: 001

Patent Family:

Kind Date Applicat No Kind Date Patent No 20031015 GB 20028195 20020409 200378 B GB 2387437 Α Α

Priority Applications (No Type Date): GB 20028195 A 20020409 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes 18 C12Q-001/68 GB 2387437 Α

... bind to a third substance in the presence of non-binding oligomers is useful to authenticate unique or valuable articles such as works of art, diamonds and jewelry

Abstract (Basic):

to confirm the presence of A and B on the article or substance, with a number of non-binding oligomers present in excess to render copying of A and B unattractive...

An INDEPENDENT CLAIM is also included for labeling an article it is wished to authenticate, where a number of unique oligomers have been attached to the article, including two unique target oligomers A

... The invention is useful to authenticate unique articles such as works or art, diamonds and jewelry, particularly precious stones, especially rough or polished diamonds , and also to articles of high value of which a number of copies are produced. The invention may also be applied to explosives, aerosols, organic solvents...

Technology Focus:

B DNA which is amplified by PCR. The article is a precious stone, particularly a diamond .

... Title Terms: DIAMOND ;

(Item 4 from file: 350) 15/3,K/7 DIALOG(R) File 350: Derwent WPIX (c) 2005 Thomson Derwent. All rts. reserv.

015495182 **Image available** WPI Acc No: 2003-557329/200352

XRPX Acc No: N03-442959

Flame marking system for diamond, has magnesium powder sprayed on carrier tape, which is ignited to burn diamond and transfer indicia pattern to diamond

Patent Assignee: BENDERLY D (BEND-I)

Inventor: BENDERLY D

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date Week US 20030085983 Al 20030508 US 2000204506 P 20000516 200352 B

US 2001858846 A 20010516

US 6662716 B2 20031216 US 2000204506 P 20000516 200382

US 2001858846 A 20010516

Priority Applications (No Type Date): US 2000204506 P 20000516; US 2001858846 A 20010516

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20030085983 A1 5 B41J-002/335 Provisional application US 2000204506

US 6662716 B2 B41F-017/00 Provisional application US 2000204506

Flame marking system for diamond, has magnesium powder sprayed on carrier tape, which is ignited to burn diamond and transfer indicia pattern to diamond

Abstract (Basic):

is made of a material that is resistant to temperature above the melting point of **diamond**. The magnesium powder (28) is sprayed on the tape, in a pattern corresponding to the indicia that is to be marked on the **diamond**, and is ignited to burn the **diamond** and transfer the indicia pattern to the **diamond**.

.. An INDEPENDENT CLAIM is also included for method of marking diamond .

. . .

- ...For marking machine-readable indicia such as one-or- two dimensional barcode symbols, human-readable indicia such as alphabetical and numerical indicia, logo or image such as certification mark of quality, which are imperceptible to naked eye, in gemstones such as diamond.
- ... The indicia is marked in the **diamond** on-site at a jewelers' premises without requiring a skilled marking personnel, large sized and...
- ...The figure shows a sectional view of the apertured tape mounted on the gemstone during marking
- ... Title Terms: DIAMOND;

15/3,K/8 (Item 5 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

011303236 **Image available**
WPI Acc No: 1997-281141/199725

XRPX Acc No: N97-232879

Gemstone registration system for classifying and recording information with respect to gemstones for identification - has site computer with

data signal receiving and displaying device, using two dimensional video camera, which is part of light image capture arrangement

Patent Assignee: OMPHALOS RECOVERY SYSTEMS INC (OMPH-N); GEMPRINT

TECHNOLOGIES INC (GEMP-N)

Inventor: LEYDON M; VANIER D J; WALLNER H F

Number of Countries: 072 Number of Patents: 009

Patent Family:

_ ~ .		-							
Pat	ent No	Kind	Date	App	olicat No	Kind	Date	Week	
WO	9717603	A1	19970515	WO	96CA731	Α	19961107	199725	В
CA	2162532	Α	19970510	CA	2162532	Α	19951109	199736	
ΑU	9672748	A	19970529	ΑU	9672748	Α	19961107	199737	
ZA	9609394	Α	19970923	ZA	969394	А	19961107	199744	
GB	2322255	A	19980819	WO	96CA731	Α	19961107	199835	
				GB	989502	Α	19980506		
US	5828405	Α	19981027	US	96745361	A	19961108	199850	
IL	119576	Α	19990509	IL	119576	A	19961106	1.99926	
GB	2322255	В	20000719	WO	96CA731	Α	19961107	200036	
				GB	989502	A	19980506		
CA	2162532	С	20010130	CA	2162532	Α	19951109	200117	

Priority Applications (No Type Date): CA 2162532 A 19951109

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9717603 A1 E 25 G01N-021/87

Designated States (National): AL AM AT AU AZ BB BG BR BY CH CN CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG

CA 2162532 G06F-019/00 Α AU 9672748 Α G01N-021/87 Based on patent WO 9717603 27 G06K-000/00 ZA 9609394 Α Α GB 2322255 G01N-021/87 Based on patent WO 9717603 Α US 5828405 H04N-007/18 Α G01N-021/87 IL 119576 GB 2322255 В G01N-021/87 Based on patent WO 9717603 C E G06F-019/00 CA 2162532

Gemstone registration system for classifying and recording information with respect to gemstones for identification...

- ...Abstract (Basic): laser diode in combination with optical device for producing collimated light beam directed at a **gemstone** fixture. The fixture orientates a **gemstone** relative the collimated light beam. A screen collects and displays thr unique light pattern from the **gemstone**. The video camera directed at the screen captures the unique pattern simultaneously, and signal from...
- ...approval by a user. The computer has user input device to associate characteristics of the **gemstone** producing the image with the digital signal to produce a combined signal. A printer produces a **certificate** identifying the characteristics and reproduces the corrected unique pattern. The computer forms a communication link...
- ...ADVANTAGE Site computer evaluates each captured image and actuation control adjusts laser control. Apparatus overcomes **number** of deficiencies with respect to prior art...

15/3,K/9 (Item 6 from file: 350) DIALOG(R)File 350:Derwent WPIX (c) 2005 Thomson Derwent. All rts. reserv.

002016937

WPI. Acc No: 1978-29968A/197816

Diamond abrasive discs prodn. - using line installation for cold and hot compacting of diamond -containing metal powder charge

Patent Assignee: SELEZOV E T (SELE-I)
Inventor: DEDYULYA I I; ROZHENKO A F

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week SU 552136 A 19770411 197816 B

Priority Applications (No Type Date): SU 2169389 A 19750902

Diamond abrasive discs prodn...

...using line installation for cold and hot compacting of diamond -containing metal powder charge

...Abstract (Basic): Improved quality of the articles and efficiency of the process of production of diamond abrasive discs in the line installation for cold and hot compacting of diamond -contg. metal powder charge is ensured by modifications to the design described in Parent Author's Certificate No. 233416...

Title Terms: DIAMOND ;

?

20/3,K/1 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

013065061 **Image available**
WPI Acc No: 2000-236933/200020

XRPX Acc No: N00-177673

Optical scanner with reflected light collector includes holographic optical element which is divided into zones one which controlling outgoing beam and another receives incoming reflected light and focuses it onto photo detector

Patent Assignee: SYMBOL TECHNOLOGIES INC (SYMB-N)

Inventor: LI Y; STERN M; TAN C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Applicat No Kind Week Date Date US 6029893 20000229 US 95447089 Α 19950522 200020 B Α US 97876681 Α 19970617

Priority Applications (No Type Date): US 95447089 A 19950522; US 97876681 A 19970617

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 6029893 A 15 G06K-007/10 Cont of application US 95447089
Optical scanner with reflected light collector includes holographic optical element which is divided into zones one which controlling outgoing beam and another receives incoming...

Abstract (Basic):

- An **optical** scanner for scanning a light beam across a target to read **optical** indicia, the scanner comprises of: a light source for producing the light beam; beam-generation **optical** elements for shaping and directing the light beam; collector **optical** elements for collecting and shaping light reflected from the target; a photosensor for detecting a...
- diffuser configured to shape the light beam, where the optical diffuser comprises a light shaping diffuser comprising a holographic element that accepts incoming light, and homogenizes and redistributes it over a predetermined angular spread. The optical diffuser comprises a number of sections, each section configured to shape the light beam differently from another section. Two of the sections of the optical diffuser have optical characteristics that differ in ways that shape the light beam differently so that the light beam passing through the two sections is given a different beam waist. The scanner is configured for reading indicia in which information is encoded as differences in reflectivity of portions of the indicia...
- ...For optical scanners...
- ...techniques may he used. Provide a scanner in which the cross-section of the focused laser spot may easily be controlled during manufacture. Reduces dead decode zone in front of the...
- ...the scanner. Extends working range and/or high resolution in decoding high density bar code **symbols**. Improves light collection returned from a target symbol, thereby reducing the size and weight of...
- ...holographic windows for laser beam scanning. (113c,d,e...

Title Terms: OPTICAL;

20/3,K/2 (Item 2 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

010623873 **Image available**
WPI Acc No: 1996-120826/199613

XRPX Acc No: N96-101269

Scanning drive mechanism for information reading device e.g. bar code reader - has rotation drive unit which enables rotation of moving part

Patent Assignee: OLYMPUS OPTICAL CO LTD (OLYU) Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date JP 8016705 19960119 JP 94148301 Α 19940629 199613 B A B2 20021007 JP 94148301 JP 3333049 Α 19940629 200273

Priority Applications (No Type Date): JP 94148301 A 19940629

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 8016705 A 6 G06K-007/10

JP 3333049 B2 6 G06K-007/10 Previous Publ. patent JP 8016705

Scanning drive mechanism for information reading device e.g. bar code reader...

- ...Abstract (Basic): The scanning drive mechanism uses laser light for scanning optical symbols such as bar code. The information notation is read by coding pattern using light radiated from a laser diode. The information reading device reads the information from a reflected light. A permanent magnet provided at the moving part (5), is fixed rotatably at centre point. The laser diode and information reading device are provided on a substrate (1) at which the fixed part (6) is fixed...
- ...the fixed part. The elastic body bending correction device maintains superficial rotation by holding the **number** of vibrations of the elastic body. The magnet is attracted by a predetermined torque, using

20/3,K/3 (Item 3 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

010623872 **Image available**
WPI Acc No: 1996-120825/199613
Related WPI Acc No: 1996-120822
XRPX Acc No: N96-101268

Scanning drive mechanism for information reading device e.g. bar code reader - stops braking of rotation operation for moving part by reducing primary side potential of coil to ground potential

Patent Assignee: OLYMPUS OPTICAL CO LTD (OLYU)

Inventor: KASHIMA A; KUBO H; MASHIKO T; NAGANO S; OSANAI A; SUGATA T

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 8016704 A 19960119 JP 94148300 A 19940629 199613 B

US 5614705 A 19970325 US 95494490 A 19950626 199718 JP 3542168 B2 20040714 JP 94148300 A 19940629 200446

Priority Applications (No Type Date): JP 94148300 A 19940629; JP 94148247 A 19940629

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 8016704 A 8 G06K-007/10

US 5614705 A 14 G06K-007/10

JP 3542168 B2 11 G06K-007/10 Previous Publ. patent JP 8016704

Scanning drive mechanism for information reading device e.g. bar code reader...

- ... Abstract (Basic): The scanning drive mechanism reads optical symbols like bar code. The information notation by coding pattern is read by radiating light from an optical source. The information reading device reads the information from the reflecting light. The light radiated from an optical source is condensed on a scanning mirror (15). The moving part is equipped with a...
- ...fixed part. The elastic body bending correction device maintains a superficial rotation and holds the **number** of vibrations of an elastic body. The magnet is attracted by a predetermined torque. The...
- ... Abstract (Equivalent): a light source for generating a laser beam...
- ...reflection means having an emission mirror unit for reflecting the laser beam and emitting the laser beam towards an optical pattern representing information in a form of a predetermined pattern, and a condensing mirror unit for condensing a reflection beam from said optical pattern in a predetermined direction, said condensing mirror unit being integrally formed with said emission...
- ...said condensing mirror unit, said light receiving surface being located within a range of an **optical** path of the reflection beam received by said condensing mirror unit in such a position...
- ...unit, and the received reflection beam being converted to an electric signal corresponding to said **optical** pattern...

22/3,K/1 (Item 1 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2005 JPO & JAPIO. All rts. reserv.

06672906 **Image available**
SPECTACLE LENS AND ITS PRODUCTION

PUB. NO.: 2000-258732 [JP 2000258732 A] PUBLISHED: September 22, 2000 (20000922)

INVENTOR(s): MIYAZAWA MAKOTO APPLICANT(s): SEIKO EPSON CORP

APPL. NO.: 11-057312 [JP 9957312] FILED: March 04, 1999 (19990304)

ABSTRACT

PROBLEM TO BE SOLVED: To decrease the **number** of shaping molds by putting concealed **marks** to a concave face.

SOLUTION: The spectacle lens 1 is an inner face progressive multifocus lens of which the convex face 2 is **optically** finished by the shaping mold and the concave face (inner face) 3 is generated with...

...face 2 is a spherical face or rotationally axisymmetric aspherical face. A variety of concealed marks are put on the concave face 3. The concave face is marked with, for example, two reference position earmarks 41 for indexing a fitting point, a manufacturer mark 42 indicating the manufacturer, a merchandise mark 43 indicating a merchandise name, a mark 44 indicating an admission diopter, a design mark 45 for identifying design , etc., by for example, a diamond pen, etc. The progressive multifocus spectacle lens 1 applied with the concealed marks including the reference position earmarks 41 on the concave face 3 generated by polishing eventually eliminates the need for the transfer of the concealed marks by the shaping molds.

COPYRIGHT: (C) 2000, JPO

22/3,K/2 (Item 2 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2005 JPO & JAPIO. All rts. reserv.

05919568 **Image available**
MOLDING METHOD FOR RECORDING DISK

PUB. NO.: 10-202668 [JP 10202668 A] PUBLISHED: August 04, 1998 (19980804)

INVENTOR(s): NAKAYAMA MASATOSHI ISHIDA TOSHIHIKO

UEDA KUNIHIRO TANABE HIROSHI

APPLICANT(s): TDK CORP [000306] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.: 10-016317 [JP 9816317] FILED: January 12, 1998 (19980112)

JAPIO KEYWORD: R002 (LASERS); R004 (PLASMA); R020 (VACUUM TECHNIQUES); R102 (APPLIED ELECTRONICS...

ABSTRACT

- ... same, carrying out the deposit separation on the back of the stamper to form a diamond -shaped film to be coated thereon, supporting the stamper in a molding die cavity and...
- ...SOLUTION: A diamond shaped film is formed on the back 8 of a stamper in an ordinary film manufacturing device. As the diamond -shaped film is formed on the back 8 of the stamper 1 of a molding...
- ...1 can be prolonged to a large extent. Also as it is hard to form marks on the stamper 1, characteristics of a matrix surface of the stamper 1 are hard...
- ... is manufactured to achieve the realization of long life of the stamper 1, and a **number** of disks can be manufactured by one stamper 1 to achieve the reduction of the...

22/3,K/3 (Item 3 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2005 JPO & JAPIO. All rts. reserv.

04591560 **Image available**

OPTICAL ELEMENT FORMING DIE AND ITS PRODUCTION

PUB. NO.: 06-263460 [JP 6263460 A] PUBLISHED: September 20, 1994 (19940920)

INVENTOR(s): HIRABAYASHI KEIJI

APPLICANT(s): CANON INC [000100] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.: 05-049529 [JP 9349529] FILED: March 10, 1993 (19930310)

JOURNAL: Section: C, Section No. 1288, Vol. 18, No. 664, Pg. 119,

December 15, 1994 (19941215)

OPTICAL ELEMENT FORMING DIE AND ITS PRODUCTION

...JAPIO CLASS: Optical Equipment)

ABSTRACT

...of glass from a die and the durability of the die by forming a platediamond polycrystal film on at least the forming surface of the die base material...

... surface of a uniformly scratched die base material 71, and the base material 71 is **etched** through the mask 72 to form a pattern having >=10nm depth. The mask 72 is then removed, and a plate- **diamond** crystal 73 is formed only on the scratched region by using a raw gas containing 0.01-10% carbon source and in which the ratio (O/C) of **number** of 0 atoms to that of C atoms is controlled to 0.5 <= (O/C) <=1.2. The crystals 73 are grown and joined to form a **diamond** polycrystal film 74 uniform in crystalline orientation property and having <=0.2.mu.m surface roughness, and an **optical** element forming die is obtained.

22/3,K/4 (Item 4 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2005 JPO & JAPIO. All rts. reserv.

04496392 **Image available** SEMICONDUCTOR WAFER

PUB. NO.: 06-140292 [JP 6140292 A]

PUBLISHED: May 20, 1994 (19940520)

INVENTOR(s): MURAYAMA AKIYO

APPLICANT(s): MATSUSHITA ELECTRON CORP [000584] (A Japanese Company or

Corporation), JP (Japan)

APPL. NO.: 04-284830 [JP 92284830] FILED: October 23, 1992 (19921023)

JOURNAL: Section: E, Section No. 1593, Vol. 18, No. 442, Pg. 46,

August 17, 1994 (19940817)

ABSTRACT

... to be accurately measured with a simple device by a method wherein a triangular or diamond -shaped dimension controlling pattern is formed on the surface of the semiconductor wafer where the...

...acute-angled triangle of base length 3.mu.m and height 15.mu.m and marked in white. The base length of the triangle can be set 1.5 to 3...
... large as the base length. Or, the dimension controlling pattern 6 is, for instance, a diamond -shaped form of width 3.mu.m and height 30.mu.m and marked in white. By this setup, when a semiconductor wafer is not correctly formed in dimensions as designed, the dimensional change is enlarged in a dimension controlling pattern, which is measured by an optical dimension measuring device, and consequently a circuit pattern provided onto a semiconductor wafer can be...

22/3,K/5 (Item 5 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2005 JPO & JAPIO. All rts. reserv.

03380224 **Image available**

MANUFACTURE SYSTEM

PUB. NO.: 03-043124 [JP 3043124 A] PUBLISHED: February 25, 1991 (19910225)

INVENTOR(s): IMAI SHOSAKU

SHINO HIDEO

APPLICANT(s): SEIKO EPSON CORP [000236] (A Japanese Company or Corporation)

, JP (Japan)

APPL. NO.: 01-175169 [JP 89175169]

FILED: July 06, 1989 (19890706)

JOURNAL: Section: M, Section No. 1111, Vol. 15, No. 182, Pg. 35, May

10, 1991 (19910510)

JAPIO KEYWORD: R002 (LASERS); R007 (ULTRASONIC WAVES); R064 (MACHINERY...

ABSTRACT

... host computer 3, and the specification of a product produced hereafter is coded to be marked in the lead frame with a laser marker 2. The said code is read with a read part 5, required IC designated by the code is taken out from the IC stocker 6 of diamond touch mlc 4, and diamond touch is made on the lead frame by diamond touch mlc. The condition of wire bonding is set by auto wire bonding mlc 8...

...mlc 14 based on the read of a read part 11, a required item is 1marked based on a read part 17 in a laser marker 16.

22/3,K/6 (Item 6 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2005 JPO & JAPIO. All rts. reserv.

03189501 BLOCK GAUGE

02-165001 [JP 2165001 A] PUB. NO.: June 26, 1990 (19900626) PUBLISHED:

KOSUDA TETSUO INVENTOR(s):

KAMATA YOSHIRO TAKIZAWA KINJI

APPLICANT(s): MITSUTOYO CORP [402556] (A Japanese Company or Corporation),

JP (Japan)

63-321275 [JP 88321275] APPL. NO.: FILED: December 19, 1988 (19881219)

Section: P, Section No. 1104, Vol. 14, No. 422, Pg. 119, JOURNAL:

September 12, 1990 (19900912)

JAPIO KEYWORD: R002 (LASERS)

ABSTRACT

...component, 3-7 weight % of Y oxide and 0-20 weight % of Al oxide, and said gauge through irradiation of a laser light in an ambience of an inert gas...

...and sintered. The obtained ceramic body of Zr (in a lump) is cut by a cutter to be a rectangular parallelepiped slightly larger than a predetermined size. The rectangular parallelepiped...

... moreover nominal dimension becomes a given value, which is further shaped into a block gauge. Laser beams are cast by a YAG laser to the surface of the rectangular parallelepiped where a mark is to be patterned while N(sub 2) gas is blown with a given angle. The nominal dimension, product number and trade mark are marked .

(Item 7 from file: 347) 22/3,K/7

DIALOG(R) File 347: JAPIO

(c) 2005 JPO & JAPIO. All rts. reserv.

02677622 **Image available** LIQUID CRYSTAL DISPLAY PANEL

PUB. NO.: 63-294522 [JP 63294522 A] PUBLISHED: December 01, 1988 (19881201)

INVENTOR(s): KIKUCHI ISAKO TATEMICHI TOSHIO

APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company

or Corporation), JP (Japan) 62-130504 [JP 87130504]

APPL. NO.: FILED: May 27, 1987 (19870527)

Section: P, Section No. 847, Vol. 13, No. 125, Pg. 111, March JOURNAL:

28, 1989 (19890328)

Optical Equipment); 44.9 (COMMUNICATION ...JAPIO CLASS: JAPIO KEYWORD: R011 (LIQUID CRYSTALS); R012 (OPTICAL FIBERS); R044 (CHEMISTRY...

ABSTRACT

... defects such as disconnection and short-circuiting of electrodes by adhesion of dust and defective etching with a fewer stages by cutting the patterning of the electrodes by a cutter, thereby...

...26 with the transparent electrodes are then set on an X-Y plotter and a diamond cutter is applied thereto to cut the electrodes 23, 24. Oriented films 27 are formed...

... linear polarizing plates 21, 22 are stuck to the outside of the two substrates. The number of the stages is thereby decreased and the fine patterning of the inter-electrode arrangement...

22/3,K/8 (Item 8 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2005 JPO & JAPIO. All rts. reserv.

00430979

EVALUATING DEVICE FOR INSULATING FILM QUALITY

PUB. NO.: 54-082979 [JP 54082979 A]

PUBLISHED: July 02, 1979 (19790702)

INVENTOR(s): NISHIOKA SUNAO

APPLICANT(s): MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or

Corporation), JP (Japan)

APPL. NO.: 52-150859 [JP 77150859] FILED: December 14, 1977 (19771214)

JOURNAL: Section: E, Section No. 135, Vol. 03, No. 106, Pg. 52,

September 07, 1979 (19790907)

ABSTRACT

PURPOSE: To facilitate to count the **number** of the fault occurring on the film when the quality is evaluated for the insulating...

...notch line 12 is provided on one surface of glass plate 10 scribing with the diamond tip or through the photo etching so that at least one unit of the grid may exist within the viewfield of optical microscope 8. Then transparent conducting film 9 is coated on the surface, thus obtaining glass...

22/3,K/9 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

014013017 **Image available**
WPI Acc No: 2001-497231/200155

XRPX Acc No: N01-368493

Laser system for marking precious stones, especially diamonds, creates tiny craters in surface to accuracy of less than one micron

Patent Assignee: BLS BENELUX LASER SYSTEMS (BLSB-N)

Inventor: CALLENS B

Number of Countries: 001 Number of Patents: 001

Patent Family:

Priority Applications (No Type Date): BE 99149 A 19990304

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

BE 1012499 A6 F 25 B23K-000/00

Laser system for marking precious stones, especially diamonds, creates tiny craters in surface to accuracy of less than one micron

```
Abstract (Basic):
           The laser generator (2) produces a beam which is expanded (20)
    and reflected (24) towards the precious...
... The tiny craters formed on the surface of the stone can trace out
    identification data, logo 's, etc.
           Identification marking of precious stones...
... laser generator (2...
         (10...
... laser
... diamond (48
Title Terms: LASER;
22/3,K/10
               (Item 2 from file: 350)
DIALOG(R) File 350: Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.
             **Image available**
013683833
WPI Acc No: 2001-168046/200117
Related WPI Acc No: 2003-669518
XRAM Acc No: C01-050065
XRPX Acc No: N01-121187
  Fabrication of multilayer microelectronic interconnect structure used in
  high density interconnects for high performance microelectronic device
  chips uses a low dielectric constant material, e.g. air as the intralevel
  dielectric
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )
Inventor: BUCHWALTER L P; CALLEGARI A C; COHEN S A; GRAHAM T O; HUMMEL J P;
  JAHNES C V; PURUSHOTHAMAN S; SAENGER K L; SHAW J M
Number of Countries: 001 Number of Patents: 001
Patent Family:
                             Applicat No
                                            Kind
Patent No
             Kind
                     Date
                                                   Date
                                                            Week
             B1 20010206
                             US 9752174
                                            Ρ
                                                 19970710
                                                           200117 B
US 6184121
                             US 98112919
                                                 19980709
Priority Applications (No Type Date): US 9752174 P 19970710; US 98112919 A
  19980709
Patent Details:
Patent No Kind Lan Pg
                         Main IPC
                                     Filing Notes
US 6184121
                   18 H01L-021/4763 Provisional application US 9752174
Abstract (Basic):
           a top layer and a lower layer on a semiconductor wafer (10);
    (ii) patterning and etching trenches for wiring tracks on the top
    layer and vias in the lower layer; (iii...
... vias with a thick conductive wiring layer metal; (iv) planarizing the
    wiring layer metal by etching or polishing to achieve a coplanar
    inlaid structure of conductors and vias embedded as metal...
...v) repeating steps (i-iv) until a requisite number of wiring levels in
    the interconnect structure are fabricated...
...all areas of the wafer not directly covered by the conductors by means
```

of an etching process while leaving the dielectric material intact

under the metal feature...

- ...viii) annealing the **etched** structure at an elevated temperature in a reducing atmosphere to mitigate any plasma process induced...
- ...xi) etching terminal vias in the optional barrier layer, insulating cover layer, and the thin conformal passivation...
- ...The figure shows a schematic sketch of the interconnect structure after terminal vias have been **etched** and terminal pads are deposited to complete the fabrication of the structure...

 Technology Focus:
- ... Preferred Method: The **etching** of the dielectric material is performed only on the top most plane pair of wiring...
- ...chemical vapor deposition (CVD), or plasma enhanced CVD (PECVD). The patterning as well as the etching back of the dielectric layer is by wet chemical etching, reactive ion etching (RIE), plasma etching, plasma assisted etching, electron cyclotron resonance plasma etching, ion beam assisted etching, laser ablation, and/or by direct photolithographic patterning. The planarization of the wiring layer metal is by RIE, ion milling, mechanical polishing, chemical-mechanical polishing (CMP), and/or electrochemical etching. The annealing of the etched structure is done in a reducing environment comprising hydrogen (H2) or forming gas which is...
- ...is selectively applied on the conductors only. The terminal vias are produced by reactive ion etching (RIE), plasma etching, ion milling, laser ablation, or by direct photolithographic patterning of the environmental barrier layer, the laminated cover, and...
- ...of 20-200 nm. The environmental barrier layer is silicon oxide, silicon nitride, and/or diamond -like carbon, 50-1000 nm thick. The terminal metal pads are wire bond pads, solder...

22/3,K/11 (Item 3 from file: 350) DIALOG(R)File 350:Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

013321847 **Image available**
WPI Acc No: 2000-493786/200044

XRPX Acc No: N00-366602

Optical fiber array element for laser beam printer, has optical fiber holder into which optical fiber is inserted where holder is provided between flat surface of holder and a flat plate

Patent Assignee: HITACHI KOKI KK (HITO)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 2000180639 A 20000630 JP 98360576 A 19981218 200044 B

Priority Applications (No Type Date): JP 98360576 A 19981218

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 2000180639 A 7 G02B-006/08

Optical fiber array element for laser beam printer, has optical fiber holder into which optical fiber is inserted where holder is provided between flat surface of holder and a flat...

Abstract (Basic):

The optical fiber array has an optical fibers (3) inserted into optical fiber holder (1) which is provided inbetween flat plate portion (2) and flat surface of holder so as to perform uniform distribution of multiple optical fibers arranged at equal intervals in vertical direction. Multiple auxiliary optical fibers (5) are also inserted in the holder.

The optical fiber array has a joining material to make the points of some optical fibers which make irradiation and propagation of light emitted from the light source. This V...

...structure of V-groove block is formed by dicing process of Si wafer using anisotropic etching or diamond blade saw of Si wafer, ceramic and glass material. An INDEPENDENT CLAIM is also included for the manufacturing method of optical fiber array element...

...For use as multibeam light source of laser beam printer...

...Since lesser number of components are used, manufacture of optical fiber array accuracy is attained, thereby accumulation of manufacturing error of each component is made...

... The figure shows distribution relationship of optical fiber array and auxiliary optical fiber on the V-groove...

... Optical fiber holder (1...

... Optical fibers (3...

...Auxiliary optical fiber (5 Title Terms: OPTICAL;

22/3,K/12 (Item 4 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

Image available 012899531 WPI Acc No: 2000-071366/200006

XRPX Acc No: N00-055784

De- marking head for removing laser marks from an integrated circuit (IC) package

Patent Assignee: MICRON ELECTRONICS INC (MICR-N)

Inventor: CANELLA R L; IBARRA T T

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date US 5997388 A 19991207 US 97909187 Α 19970811 200006 B

Priority Applications (No Type Date): US 97909187 A 19970811

Patent Details:

Patent No Kind Lan Pg US 5997388 A 19 Main IPC Filing Notes

19 B24B-007/06

De- marking head for removing laser marks from an integrated circuit (IC) package

Abstract (Basic):

from the recess to a magazine (13) by respective vacuum pickup heads (46,84). The number of ICs released from one magazine is controlled by a feed controller (34). The magazines...

- ...the IC by spray nozzles (64), for cleaning. The abrasive belt has metal bonded, synthetic **diamond** particles of grit with a size in the range of 6-40 microns...
- ...Enables controlled removal of package material from a marked surface to maintain a remarking surface. Enables removal of laser marks from 1000-2000 plastic package IC. Enables formation of a distinct mark by maintaining a...
- ...The figure shows an isometric view of the <code>laser</code> mark removing system

... Title Terms: LASER;

22/3,K/13 (Item 5 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

011958589 **Image available**
WPI Acc No: 1998-375499/199832

XRPX Acc No: N98-293617

Corneal layer separating instrument - has transitional section for locating along diameter of optical zone, and semi-circular working tip with inner diameter of 6-8 mm

Patent Assignee: UNIV LUMUMBA (UYLU)

Inventor: BELYAEV V S; DUSHIN N V; FROLOV M A
Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week RU 2099034 C1 19971220 RU 9424964 A 19940704 199832 B

Priority Applications (No Type Date): RU 9424964 A 19940704

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

RU 2099034 C1 3 A61F-009/007

- ... has transitional section for locating along diameter of optical
 zone, and semi-circular working tip with inner diameter of 6-8 mm
 ...Abstract (Basic): The transitional section is designed to lie along
 the marked diameter of the optical zone, and the working tip is in
 the shape of a half-ring with an...
- ...be used to separate the layers of the cornea following an incision made by a diamond -tipped instrument...

... Title Terms: OPTICAL;

22/3,K/14 (Item 6 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

011939059 **Image available** WPI Acc No: 1998-355969/199831

XRPX Acc No: N98-278874

Manufacturing method for optical component e.g. Fresnel lens - involves marking end cutting edge of diamond cutting tool, cutting slope in serrate groove, sending cutting blade end, and cutting vertical surface of serrate groove at least twice

Patent Assignee: OLYMPUS OPTICAL CO LTD (OLYU) Number of Countries: 001 Number of Patents: 001 Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 10138004 A 19980526 JP 96291506 A 19961101 199831 B

Priority Applications (No Type Date): JP 96291506 A 19961101

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 10138004 A 5 B23B-005/14

Manufacturing method for optical component e.g. Fresnel lens...

- ...involves marking end cutting edge of diamond cutting tool, cutting slope in serrate groove, sending cutting blade end, and cutting vertical surface...
- ... Abstract (Basic): The method involves marking the cutting blade of a diamond cutting tool (2) in front of a rotary Fresnel lens board or a Fresnel lens...
- ... The end cutting edge (30) of the diamond cutting tool is marked. The slope (15a) in the serrate groove is cut. The cutting blade end (18) is ...
- ...and the vertical surface (15b) of the serrate groove is cut. The same process of marking, cutting, sending, and cutting are done at least twice...
- ...prevents elastic deformation of workpiece. Chipping of cutting blade is hardly produced. Offers nearly perfect design performance of optical component. Extends durability of expensive diamond cutting tool...
 ...Title Terms: OPTICAL;

22/3,K/15 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

010553120 **Image available**
WPI Acc No: 1996-050073/199606

XRPX Acc No: N96-041978

Engraving of inscription on precious stone e.g. diamond - presenting stone to laser beam, with stone being supported on XY table

Patent Assignee: SATIENRAPAT P (SATI-I); HAKOUNE M R (HAKO-I)

Inventor: HAKOUNE M R

Number of Countries: 003 Number of Patents: 003

Patent Family:

Patent No Date Applicat No Kind Date Week Kind AU 9520365 19951214 AU 9520365 Α 19950530 199606 Α BE 94549 19960402 BE 1008387 Α6 Α 19940602 199620 19961211 CN 95107187 19950602 CN 1137431 Α 199805 А

Priority Applications (No Type Date): BE 94549 A 19940602; CN 95107187 A 19950602

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

AU 9520365 A 11 B28D-005/00

BE 1008387 A6 10 C04B-000/00

CN 1137431 A B23K-026/08

Engraving of inscription on precious stone e.g. diamond - ...

- ...presenting stone to laser beam, with stone being supported on XY table
- ... Abstract (Basic): itself being displaced along the X and Y axes. The stone is presented to a laser beam having a wavelength of 1064 nanometres reducible to 532 nanometres, with a predetermined surface...
- ... The focal point of the laser beam is displaced in a Z-plane in order to make the same to coincide...
- \ldots the table according to the X- and Y-axis. The stone is presented to the laser beam with a facet disposed in a plane perpendicular to the beam
- ...ADVANTAGE Allows inscription of one or more symbols to be reliably made on facet of stone using laser of reduced power...

... Title Terms: INSCRIBE;

(Item 8 from file: 350) 22/3,K/16

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

Image available 010332254 WPI Acc No: 1995-233946/199531

XRPX Acc No: N95-182373

Polarising filter for IR radiation using diamond membrane - has thin layer of diamond laid onto silicon@ substrate, with aperture created by chemical etching , close to Brewster incidence angle

Patent Assignee: CNRS CENT NAT RECH SCI (CNRS)

Inventor: CHARDONNET C

Number of Countries: 018 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date A1 19950630 FR 9315702 199531 B FR 2714489 Α 19931227 A1 19950706 WO 94FR1540 19941227 WO 9518394 199532

Priority Applications (No Type Date): FR 9315702 A 19931227

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

A1 18 G02B-005/30 FR 2714489

A1 F 22 G02B-005/30 WO 9518394

Designated States (National): JP US

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE .

Polarising filter for IR radiation using diamond membrane...

- ... has thin layer of diamond laid onto silicon@ substrate, with aperture created by chemical etching , close to Brewster incidence angle
- ... Abstract (Basic): The device consists of a membrane layer of e.g. diamond , of a thickness approximating to an odd multiple of one-quarter of the wavelength at the centre of the 'optical waveband to be treated. The typical thickness of the membrane is between 0.4 and
- ...silicon substrate layer, the part of which facing the membrane is then removed by chemical etching . The substrate is of a thickness of about 100 micrometres, with a dia. of several centimetres , and the aperture defined by etching is elliptical is shape with axial dimensions of

the order of a centimetre. A **number** of membranes may be arranged parallel to each other...
...Title Terms: **DIAMOND**;

22/3,K/17 (Item 9 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

010304905 **Image available**
WPI Acc No: 1995-206165/199527
Related WPI Acc No: 1994-248320

XRAM Acc No: C95-095540

Laser etching appts. for diamond substrates, used for e.g. heat sink material - comprises laser cutter and means for contacting diamond with gaseous material effective to remove carbon@ or inhibit its formation

Patent Assignee: GENERAL ELECTRIC CO (GENE)

Inventor: ANTHONY T R; FLEISCHER J F

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 5419798 A 19950530 US 9364465 A 19930521 199527 B
US 94248896 A 19940525

Priority Applications (No Type Date): US 9364465 A 19930521; US 94248896 A 19940525

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 5419798 A E 4 C23F-001/02 Div ex application US 9364465 Div ex patent US 5334280

Laser etching appts. for diamond substrates, used for e.g. heat sink material...

- ...comprises laser cutter and means for contacting diamond with gaseous material effective to remove carbon@ or inhibit its formation
- ...Abstract (Basic): An appts. for laser etching of a diamond article (1) comprises a laser cutter (9) maintained in etching relationship to the article and means for contacting the diamond at the point of etching (13) with a gaseous material effective to remove graphite or inhibit its formation...
- ... USE The appts. is used for the laser etching of diamond or synthetic diamond substrates, which are used as a heat sink material for electronic circuitry because of its very high thermal conductivity of diamond. Etched recesses in the surface of the diamond are required for the purpose of mounting chips, diodes, etc...
- ...ADVANTAGE The appts. removes any graphite formed on the surface of the diamond during processing or inhibits its formation. No further processing of the diamond is required to remove graphite deposits, c.f. prior art. If the graphite is left on the diamond it can cause short circuits when incorporated into electronic equipment, and if can also decrease the resistance of the heat sink, esp. if a number of graphite-coated regions become connected...

Title Terms: LASER ;

```
22/3,K/18 (Item 10 from file: 350)
```

DIALOG(R)File 350:Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

009680917 **Image available**
WPI Acc No: 1993-374471/199347

XRAM Acc No: C93-166135 XRPX Acc No: N93-289517

Diamond synthesis with good space controllability - by irradiating vapour contg. vaporised carbon cpd. and hydrogen@ to decompose the two components

Patent Assignee: FUJI ELECTRIC MFG CO LTD (FJIE) Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 5279184 A 19931026 JP 9280090 A 19920402 199347 B

Priority Applications (No Type Date): JP 9280090 A 19920402

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 5279184 A 5 C30B-029/04

Diamond synthesis with good space controllability...

- ...Abstract (Basic): Mixed vapour comprises a vapourised carbon cpd. and H2. Light having the number of oscillations suitable for decomposing the carbon cpd. and light having the number of oscillations differing by the above number of oscillations and the number of oscillations corresp. to Raman transition of H2 are irradiated at the mixed vapour
- ... USE/ADVANTAGE The method synthesises the diamond by chemical vapour deposition. The method etches graphite C using the decomposition of a C source by induction Raman excitation and H2 or O2 efficiently activated by a single laser light source. The result efficiently synthesises the high film diamond by light chemical vapour deposition featuring good space controllability and low temp. application without providing...

Title Terms: DIAMOND ;

22/3,K/19 (Item 11 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

008861808

WPI Acc No: 1991-365833/199150

Related WPI Acc No: 1991-365803; 1991-365805

XRAM Acc No: C91-157740

Novel optically active valerolactone deriv. - for high chiral centre introduction rate used in drugs, cosmetics food additives pesticides, etc

Patent Assignee: ASAHI DENKA KOGYO KK (ASAE)

Inventor: OGASAWARA K; TAKANO S

Number of Countries: 002 Number of Patents: 005

Patent Family:

Patent No Kind Date Applicat No Kind Date Week JP 3246289 19911101 JP 9039323 19900220 199150 Α Α US 5262552 19931116 US 91658179 Α 19910220 Α 199347 US 5352845 19941004 US 91658179 Α 19910220 199439 Α US 9336887 Α 19930325

```
US 5504219 A 19960402 US 91658179 A 19910220 199619

US 9336887 A 19930325

US 94243760 A 19940517

JP 3020980 B2 20000315 JP 9039323 A 19900220 200018
```

Priority Applications (No Type Date): JP 9039323 A 19900220; JP 9039321 A 19900220; JP 9039322 A 19900220

Patent Details:

```
Patent No Kind Lan Pq
                        Main IPC
                                    Filing Notes
JP 3246289
             Α
                   12
                                    Previous Publ. patent JP 3246289
                   11 C07D-309/30
JP 3020980
              В2
                   22 CO7C-046/06
US 5262552.
             A
                   22 C07C-041/08
                                     Div ex application US 91658179
US 5352845
             Α
                                    Div ex patent US 5262552
                                    Div ex application US 91658179
US 5504219
             Α
                   19 C07D-309/30
                                     Div ex application US 9336887
                                     Div ex patent US 5262552
                                     Div ex patent US 5352845
```

Novel optically active valerolactone deriv...

- ... Abstract (Basic): Optically active valerolactone cpd. of formula (I) is new (where R1=a protective gp. for H...
- ...R3-4 is opt. epoxy together, the stearic configuration in the chiral centre carbon atom marked with + is S- or R-one exclusively and, when the ring carbon atom marked with asterisk is chiral centre C atom, the steric consign. of the chiral centre carbon...
- ... USE/ADVANTAGE Provides optically active valerolactone derivs. with a high chiral centre introduction rate capable of mass prodn. Used ... Abstract (Equivalent): Optically active valerolactone cpds. of formula (31) are new: where R31 = hydrogen or hydroxy protecting gp...
- ...vinyl, ethynyl or phenyl, R33 = hydroxy, and R34 = hydrogen, and the chiral central carbon atoms marked with symbols * and diamond in formula (31) alternatively have one of an R-configuration or an S-configuration...
- ... Optically active cpd. of formula (1) is produced by (A) treating an optically active halogenated cpd. of formula (2) with a strong base to obtain an optically active corresponding acetylene alcohol while retaining the chirality, (B) treating this alcohol with a benzene halide of formula (3) to obtain an optically active corresponding ph-acetylene cpd. and (c) reducing the cpd. to obtain (1) while retaining...
- ...Mfg. an **optically** active (S)- or (R)-benzoquinonepentane-diol of formula (I) wher R11-13 are each H...
- ...4C alkyl and the chiral C has R- or S-configuration, comprises: (a) reacting an optically active (S)- or (R)-mevalonolactol of formula (II) and a benzenemagnesium halide of formula (III) where X1 is halogen, R14 is a OH-protecting gp. (b) acylating an optically active corresp. (S)- or (R)-phenylpentanetriol of formula (IV); (c) reducing the optically active (S)- or (R)-phenyl-pentanediester cpd. of formula (V); and (d) removing the protecting gp. R4 with an oxidising agent from optically active (S)- or (R)-phenyl-pentanediol of formula (VI) to obtain cpd. (I

...Title Terms: OPTICAL;

```
(Item 12 from file: 350)
 22/3,K/20
DIALOG(R) File 350: Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.
008861780
WPI Acc No: 1991-365805/199150
Related WPI Acc No: 1991-365803; 1991-365833
XRAM Acc No: C91-157712
  New optically active pentane derivs. - obtd. from
  (R)-(plus)-mevalonolactone and useful as intermediates various
  antioxidants
Patent Assignee: ASAHI DENKA KOGYO KK (ASAE )
Inventor: OGASAWARA K; TAKANO S
Number of Countries: 002 Number of Patents: 003
Patent Family:
Patent No
                             Applicat No
              Kind
                    Date
                                           Kind
                                                   Date
                                                           Week
                  19911101 JP 9039321
                                                          199150 B
JP 3246242
                                            Α
                                                19900220
              Α
                   19931116 US 91658179
US 5262552
              Α
                                            Α
                                                19910220
                                                          199347
                  19960402 US 91658179
US 5504219
                                                19910220
                                                          199619
              Α
                                            Ά
                             US 9336887
                                            Α
                                                 19930325
                             US 94243760
                                                19940517
                                            Α
Priority Applications (No Type Date): JP 9039321 A 19900220; JP 9039322 A
  19900220; JP 9039323 A 19900220
Patent Details:
                                     Filing Notes
Patent No Kind Lan Pg
                        Main IPC
US 5262552
                   22 C07C-046/06
            A
US 5504219
                                     Div ex application US 91658179
             Α
                   19 C07D-309/30
                                     Div ex application US 9336887
                                     Div ex patent US 5262552
                                     Div ex patent US 5352845
 New optically active pentane derivs...
... Abstract (Basic): Optically active (S) - or (R) -pentane cpds. of
    formula (I) are new: (wherein R1, R2 and...
...acyloxy gp.; R6 = hydroxy gp. or acyloxy gp.. The asymmetric with a
    "star" carbon atom marked takes either one of S-configuration or
    R-configuration. USE/ADVANTAGE - The cpds. (I) are
... Abstract (Equivalent): Optically active valerolactone cpds. of formula
    (31) are new: where R31 = hydrogen or hydroxy protecting gp...
...vinyl, ethynyl or phenyl, R33 = hydroxy, and R34 = hydrogen, and the
    chiral central carbon atoms marked with symbols * and diamond in
    formula (31) alternatively have one of an R-configuration or an
    S-configuration...
...Mfg. an optically active (S) - or (R) -benzoquinonepentane-diol of
    formula (I) wher R11-13 are each H...
...4C alkyl and the chiral C has R- or S-configuration, comprises: (a)
    reacting an optically active (S) - or (R) -mevalonolactol of formula
    (II) and a benzenemagnesium halide of formula (III) where {\tt X1} is
    halogen, R14 is a OH-protecting gp. (b) acylating an optically
    corresp. (S) - or (R)-phenylpentanetriol of formula (IV); (c) reducing
   the optically active (S) - or (R) -phenyl-pentanediester cpd. of
    formula (V); and (d) removing the protecting gp. R4 with an oxidising
```

```
agent from optically active (S) - or (R) - phenyl - pentanediol of formula
    (VI) to obtain cpd. (I
... Title Terms: OPTICAL ;
               (Item 13 from file: 350)
 22/3,K/21
DIALOG(R) File 350: Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.
008861778
WPI Acc No: 1991-365803/199150
Related WPI Acc No: 1991-365805; 1991-365833
XRAM Acc No: C91-157710
  New optically active hexadecane derivs. - prepd. from readily available
  natural phytol
Patent Assignee: ASAHI DENKA KOGYO KK (ASAE )
Inventor: OGASAWARA K; TAKANO S
Number of Countries: 002 Number of Patents: 004
Patent Family:
Patent No
                             Applicat No
                                            Kind
                                                   Date
                                                            Week
              Kind
                     Date
JP 3246240
                   19911101
                            JP 9039322
                                            Α
                                                 19900220
                                                           199150 B
              Α
                            US 91658179
                                                 19910220
US 5262552
              Α
                   19931116
                                            Α
                                                           199347
                             US 91658179
US 5504219
                   19960402
                                            Α
                                                 19910220
                                                           199619
              Α
                             US 9336887
                                            Α
                                                 19930325
                             US 94243760
                                            Α
                                                 19940517
JP 2888250'
              B2
                  19990510 JP 9039322
                                            Α
                                                19900220 199924
Priority Applications (No Type Date): JP 9039322 A 19900220; JP 9039321 A
  19900220; JP 9039323 A 19900220
Patent Details:
                                     Filing Notes
Patent No Kind Lan Pq
                         Main IPC
US 5262552
            Α
                    22 C07C-046/06
                    19 C07D-309/30
                                     Div ex application US 91658179
US 5504219
              Α
                                     Div ex application US 9336887
                                     Div ex patent US 5262552
                                     Div ex patent US 5352845
JP 2888250
              В2
                    16 C07C-033/042
                                    Previous Publ. patent JP 3246240
 New optically active hexadecane derivs...
... Abstract (Equivalent): Optically active valerolactone cpds. of formula
    (31) are new: where R31 = hydrogen or hydroxy protecting gp...
...vinyl, ethynyl or phenyl, R33 = hydroxy, and R34 = hydrogen, and the
    chiral central carbon atoms marked with symbols * and diamond in
    formula (31) alternatively have one of an R-configuration or an
    S-configuration...
...Mfg. an optically active (S) - or (R) -benzoquinonepentane-diol of
    formula (I) wher R11-13 are each H...
...4C alkyl and the chiral C has R- or S-configuration, comprises: (a)
    reacting an optically active (S)- or (R)-mevalonolactol of formula
    (II) and a benzenemagnesium halide of formula (III) where X1 is
    halogen, R14 is a OH-protecting gp. (b) acylating an optically active
    corresp. (S)- or (R)-phenylpentanetriol of formula (IV); (c) reducing
    the optically active (S) - or (R) -phenyl-pentanediester cpd. of
    formula (V); and (d) removing the protecting gp. R4 with an oxidising
    agent from optically active (S)- or (R)-phenyl-pentanediol of formula
```

(VI) to obtain cpd. (I

22/3,K/22 (Item 14 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

008562731

WPI Acc No: 1991-066766/199110

XRAM Acc No: C91-028208 XRPX Acc No: N91-051677

Forming metallic circuit channels - in which dielectric provided with defined pattern is deposited with meal which is then removed from around the channels by micro-machining

Patent Assignee: IBM CORP (IBMC); INT BUSINESS MACHINES CORP (IBMC)

Inventor: MIERSCH E F; PARK J M

Number of Countries: 005 Number of Patents: 005

Patent Family:

Luc	circ ramary	•							
Pat	ent No	Kind	Date	Apj	plicat No	Kind	Date	Week	
EΡ	415131	Α	19910306	EP	90115044	Α	19900804	199110	В
JP	3104187	Α	19910501	JΡ	90198093	Α	19900727	199124	
US	5122439	Α	19920616	US	89399058	A	19890828	199227	
	5173392	A	19921222	US	89399058	A	19890828	199302	
				US	92863114	А	19920403		
EP	415131	A3	19921119	ΕP	90115044	Α	19900804	199342	

Priority Applications (No Type Date): US 89399058 A 19890828; US 92863114 A 19920403

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 415131 A

Designated States (Regional): DE FR GB

US 5122439 A 9 G03C-005/00

US 5173392 A 8 G03C-005/00 Cont of application US 89399058 Cont of patent US 5122439

- ...Abstract (Basic): microns; (C) depositing metal, pref. copper, onto (II) and in the circuit channels; and (E) micromachining, pref. micromilling, the metal to remove it from above (II) leaving metal deposited in the...
- ...for multi chip packaging. The processes involved in (I) make it possible to eliminate a **number** of steps resulting in significant cost reduction and improved productivity...
- ... Abstract (Equivalent): Process then comprises (c) micromachining the metal to remove metal from above the dielectric while leaving metal deposited in the circuit channels to form the metallic pattern.

 Micromachining is a single crystal diamond cutting to form planar metallic pattern of flatness 1 micron or less over 1m length...
- ...Formation of a metallic pattern on a substrate comprises providing metal on substrate; micromachining metal to specific thickness; depositing a photoresist layer; etching the desired metal pattern in the layer using the photoresist as the mask; removing remaining photoresist; depositing dielectric over substrate; and micromachining the dielectric layer to the level of the metal using a single crystal diamond to provide planar metallic pattern in which flatness is within 1 micron over 1 metal...

22/3,K/23 (Item 15 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

008557165 **Image available**
WPI Acc No: 1991-061200/199109

XRAM Acc No: C91-025930 XRPX Acc No: N91-047203

Highly heat-conductive material for insulating heat radiation plate - has matrix with silicon carbide deposited 1st film and diamond deposited 2nd film

Patent Assignee: IDEMITSU PETROCHEM CO (IDEM) Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 3009552 A 19910117 JP 89145977 A 19890607 199109 B

Priority Applications (No Type Date): JP 89145977 A 19890607

- ... has matrix with silicon carbide deposited 1st film and diamond deposited 2nd film
- ...Abstract (Basic): The material comprises matrix consisting of thermo-conductive substance contg. needle shape **diamond**. The needle shaped **diamond** is pref. orientated in one direction in the matrix. Thermal conductivity of the substance is...
- ... USE/ADVANTAGE The material is used for insulating heat radiation plate for laser, diode and power IC. The material with good thermal conductivity can be prepd. in any...
- ...gas were introduced into the reaction chamber. Plasma treatment was done for 2 hrs. under designated conditions to deposit SiC film on the substrate. Then CO gas, H2 gas were introduced into the chamber. Plasma treatment was done for 10 hrs. under designated conditions for form diamond film on the SiC film. Then O2 was introduced into the chamber for etching treatment to form needle shape diamond film. Then, pulse CVI was done in the chamber. Then, the substrate was removed by etching to obtain the heat radiation plate...

... Title Terms: DIAMOND ;

22/3,K/24 (Item 16 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

008357519

WPI Acc No: 1990-244520/199032

XRAM Acc No: C90-105977 XRPX Acc No: N90-189597

New encapsulant(s) for computer chip and circuit protection - comprises polymeric film or sputtered quartz with aluminium oxide, etc.

Patent Assignee: ANONYMOUS (ANON

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week RD 315082 A 19900710 199032 B

Priority Applications (No Type Date): RD 90315082 A 19900620

- ...Abstract (Basic): corrosive atmos. Encapsulants used today are transparent and easy to remove by plasma or wet **etching** so making it easy to reveal chip and wiring **design**. Encapsulation of chips and wiring circuits in hard and impossible to **etch** materials, in wet or dry environments, without raising chip temp. to-level that will totally
- ...temps. (below 380 deg.C) and they cannot be removed by any means, except by diamond grinding, without raising substrate or chip temps. above 1000 deg.C. Deposition of materials can...
- ...used for quartz sputtering. Also, by adjusting oxygen level during reactive sputtering, one can adjust **optical** transmission of film by changing compsn. to Al or zirconium-rich and so deposit films...
- ...between them. So chip will be protected from examination of wire interconnects and actual device **design** .

22/3,K/25 (Item 17 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

008262249 **Image available**
WPI Acc No: 1990-149250/199020

XRPX Acc No: N90-115699

Magnetic media containing reference feature - uses reference position to direct read-write head to track zero on medium surface

Patent Assignee: INSITE PERIPHERALS (INSI-N); INSITE PERIPHERALS INC

(INSI-N)

Inventor: GODWIN J D; OTIS A B; WILLIAMS R O; WILLIAMS S P

Number of Countries: 009 Number of Patents: 004

Patent Family:

- 4	come ramary	•						
Рa	tent No	Kind	Date	Applicat No	Kind	Date	Week	
ΕP	368269	A	19900516	EP 89120677	A	19891108	199020	В
US	4935835	Α	19900619	US 88269779	A	19881110	199027	
ΕP	368269	В1	19950125	EP 89120677	A	19891108	199508	
DE	68920821	E	19950309	DE 620821	Α	19891108	199515	
				EP 89120677	A	19891108		

Priority Applications (No Type Date): US 88269779 A 19881110

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 368269 A

Designated States (Regional): BE DE FR GB IT LU NL SE

EP 368269 B1 E 16 G11B-021/08

Designated States (Regional): BE DE FR GB IT LU NL SE

DE 68920821 E G11B-021/08 Based on patent EP 368269

- ... Abstract (Basic): a surface that is accessible by a magnetic head. A permanent reference feature is indelibly marked on the surface for providing for the magnetic head, a positional reference point. The magnetic...
- ...permanent reference feature has indentations positioned along a circular track on the surface and a **number** of spacer areas positioned between adjacent indentations...
- ...data is stored within the spacer areas than within the indentations. A circular track is **inscribed** in the medium surface. The permanent reference feature has equally spaced raised arcuate areas positioned...

- ...Abstract (Equivalent): feature track (14), characterised in that said circular magnetic medium (30) comprises a plurality of optical servo tracks (16, 16', 16'') positioned on said first surface (23) for providing servo positioning information to an optical servo transducer (60), in that said depressions (26, 44) have substantially the same width (w...
- ...magnetic read/write transducer (76) a positional reference track centre area (78) relative to said **optical** servo tracks and for producing said variable amplitude pattern as a waveform (90) having a...
- ...Abstract (Equivalent): compsn. is grown on a lattice mismatched support of a second compsn. by: providing a diamond cubic or Zn blend structure support; growing a cubic Zn blend buffer film on support....
- ...growth of cubic III-V and II-VI and I-VIII cpd. semiconductor materials on diamond cubic or Zn blend structure substrate...

22/3,K/26 (Item 18 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

007763993

WPI Acc No: 1989-029105/198904

XRAM Acc No: C89-012835 XRPX Acc No: N89-022104

Patterning synthesised diamond film - comprises depositing e.g. nickel patterning film, forming diamond film on unmasked area and etching off mask with nitric acid

Patent Assignee: FUJITSU LTD (FUIT)

Number of Countries: 001 Number of Patents: 002

Patent Family:

Applicat No Kind Date Patent No Kind Date Week JP 87140371 Α 19870604 198904 B 19881212 JP 63303891 A B2 19950830 JP 87140371 Α 19870604 199539 JP 95080720

Priority Applications (No Type Date): JP 87140371 A 19870604

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 63303891 A 3

JP 95080720 B2 3 C30B-029/04 Based on patent JP 63303891

Patterning synthesised diamond film...

- ...comprises depositing e.g. nickel patterning film, forming diamond film on unmasked area and etching off mask with nitric acid
- ...Abstract (Basic): iron or cobalt film on portions of the surface of a base plate (2). A diamond film (4) is then formed on the unmasked portions. The mask is removed (3), and the diamond film (4) in the pattern is left on the base plate (2...
- ...ADVANTAGE Without drawing appts. e.g. laser beam or ion beam, a diamond pattern can be formed. The number of processing steps is reduced and damage caused by etching is avoided...
- ...In an example, a 10 micron thick diamond film (2) was formed over a base plate of high-heat conducting silicon carbide (1). A pattern of nickel film (3) was then deposited on the diamond film (10 micron wide stripes, about 1 micron thick). The diamond -film oeposition was then repeated to form a 10 micron thick patterned diamond film (4).

Finally the nickel masking was removed by **etching** with nitric acid... ... Title Terms: **DIAMOND**;

22/3,K/27 (Item 19 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

007288831

WPI Acc No: 1987-285838/198741

XRPX Acc No: N87-214241

Web registration control system for multi-colour press - has registration marks on moving web, each mark having part with symmetrical shoes disposed diagonally to motion direction

Patent Assignee: QUAD TECH INC (QUAD-N); QUAD/TECH INC (QUAD-N)

Inventor: SAINIO J W

Number of Countries: 014 Number of Patents: 007

Patent Family:

			•				
Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 240950	A	19871014	EP 87104973	Α	19870403	198741	В
AU 8771134	Α	19871008				198747	
US 4887530	A	19891219	US 86849095	Α	19860407	199008	
US 5076163	A	19911231	US 89391784	Α	19890809	199204	
EP 240950	В1	19920930	EP 87104973	Α	19870403	199240	
DE 3781922	G	19921105	DE 3781922	A	19870403	199246	
•			EP 87104973	A	19870403		
CA 1322291	С	19930921	CA 533739	A	19870402	199344	

Priority Applications (No Type Date): US 86849095 A 19860407; US 89391784 A 19890809

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 240950 A E 98

Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

US 4887530 A 40

EP 240950 B1 E 45 B41F-013/02

Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

DE 3781922 G B41F-013/02 Based on patent EP 240950

CA 1322291 C B41F-005/06

- ... has registration marks on moving web, each mark having part with symmetrical shoes disposed diagonally to motion direction
- ...Abstract (Basic): The relative positions of marks (202-206) indicating registry between the four printing units which cooperate with the moving web. Optical line scanners are arranged to generate scan signals indicating the markings of the web in respective cells, along a line of a given number of the cells as the web moves relative to the printing units...
- ... The registration marks are shaped as right angle diamonds .
- ...ADVANTAGE Register marks anywhere within scan can be viewed so that smaller, less obtrusive marks can be used than have been used previously and errors due to colourimetry changes are
- ...Abstract (Equivalent): printing units (102-105) include means (116, 117, 118, 119) for placing the respective registration marks (202, 204, 205, 206) on the web (110), the relative positions of the marks (202, 203, 204, 205, 206) being indicative of registry between the printing

units (102-105...

- ...adjusting the registry of the printing units (102-105), means for scanning (122, 122A) the marks (202-206) and generating scanning signals, and means for generating control signals (144, 142, 132) to the registry adjusting means (126) in accordance with the relative positions of the registration marks (202, 203, 204, 205, 206); characterised in that: the registration marks (202, 203, 204, 205, 206) including a portion having substantially symmetrical sides diagonal to the...
- ...150, 152), from the scanning signals, a respective point associated with each of the registration marks (202, 203, 204, 205, 206) and the means for scanning (122, 122A) operates in a...
- ...Abstract (Equivalent): error between the respective printing units of a web-fed, four-colour printing press. An **optical** line scanner is disposed over a web to generate signals indicative of the brightness level...
- ...line transverse to the motion of the web. The respective printing units each generate registration marks on the web, the relative postions of which are indicative of the relative cyclical (rotational...
- ...scan of a strip of the web centered on the expected centre line of registration marks produced by the respective printing units. The centre of the respective registration marks are determined, and the cyclical (rotational) and transverse (lateral) positions of the printing unit adjusted...
- ...ADVANTAGE Smaller, less obtrusive registration marks used. (39pp)e
- ...An **optical** line scanner is disposed over a web to generate signals indicative of the brightness level...
- ...line transverse to the motion of the web. The respective printing units each generate registration marks on the web, the relative positions of which are indicative of the relative cyclical (rotational...
- ...scan of a strip of the web centred on the expected centre line of registration marks produced by the respective printing units. The centres of the respective registration marks are determined, and the cyclical (rotational) and transverse (lateral) positions of the printing unit adjusted...

22/3,K/28 (Item 20 from file: 350) DIALOG(R)File 350:Derwent WPIX

DIALOG(K) FILE 330: Delwell WFIA

(c) 2005 Thomson Derwent. All rts. reserv.

003586847

WPI Acc No: 1983-D5043K/198311

XRPX Acc No: N83-046024

Score calculator for skittles game - uses optical monitors to form two parallel beams across ball path and reflector forming diagonal beam

Patent Assignee: KOCH H (KOCH-I)

Inventor: KOCH H

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week

DE 3207351 A 19830310 198311 B

Priority Applications (No Type Date): DE 3207351 A 19820302

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

DE 3207351 A 6

- ... uses optical monitors to form two parallel beams across ball path and reflector forming diagonal beam
- ...Abstract (Basic): The score calculator for a skittles game uses optical monitoring devices forming paths across the board between the delivery end and a pattern marked out at the other end. A ball or disc travels from the delivery end torwards the pattern which has scoring positions inside a diamond shaped boundary. The number of balls or discs, their speed and faults such as excess travel and bad alignment...
- ...An **optical** device (LS1) projects a beam (S1) across the ball or disc path at the delivery...
- ... Title Terms: OPTICAL;

22/3,K/29 (Item 21 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

001892661

WPI Acc No: 1978-C1901A/197811

Optical light guide fibre end preparation - using fibre end mount seating connected to oscillating device via wedge

Patent Assignee: SIEMENS AG (SIEI)

Inventor: GOEHLICH L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
DE 2640501 A 19780309 197811 B

Priority Applications (No Type Date): DE 2640501 A 19760906

Optical light guide fibre end preparation...

- ... Abstract (Basic): The **optical** light guide fibre end preparation has a fibre end mount seating connected to an oscillating device via a wedge. The oscillating device is **designed** as an electromagnetic, piezoceramic or magnetorestritive converter. The end of the light guide fibre, which...
- ...The damping device consists of a plate which is covered with velvet or felt. A diamond is used for marking the light guide fibre.

 Title Terms: OPTICAL;

```
9:Business & Industry(R) Jul/1994-2005/Jun 16
File
         (c) 2005 The Gale Group
      15:ABI/Inform(R) 1971-2005/Jun 15
File
         (c) 2005 ProQuest Info&Learning
File
      16:Gale Group PROMT(R) 1990-2005/Jun 16
         (c) 2005 The Gale Group
      20: Dialog Global Reporter 1997-2005/Jun 16
File
         (c) 2005 The Dialog Corp.
      47: Gale Group Magazine DB(TM) 1959-2005/Jun 16
File
         (c) 2005 The Gale group
      75:TGG Management Contents(R) 86-2005/Jun W1
File
         (c) 2005 The Gale Group
      80:TGG Aerospace/Def.Mkts(R) 1982-2005/Jun 16
File
         (c) 2005 The Gale Group
     88:Gale Group Business A.R.T.S. 1976-2005/Jun 16
File
         (c) 2005 The Gale Group
      98:General Sci Abs/Full-Text 1984-2004/Dec
File
         (c) 2005 The HW Wilson Co.
File 112:UBM Industry News 1998-2004/Jan 27
         (c) 2004 United Business Media
File 141:Readers Guide 1983-2005/Dec
         (c) 2005 The HW Wilson Co
File 148:Gale Group Trade & Industry DB 1976-2005/Jun 16
         (c) 2005 The Gale Group
File 160: Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 275: Gale Group Computer DB(TM) 1983-2005/Jun 16
         (c) 2005 The Gale Group
File 264:DIALOG Defense Newsletters 1989-2005/Jun 15
         (c) 2005 The Dialog Corp.
File 484: Periodical Abs Plustext 1986-2005/Jun W2
         (c) 2005 ProQuest
File 553: Wilson Bus. Abs. FullText 1982-2004/Dec
         (c) 2005 The HW Wilson Co
File 570: Gale Group MARS(R) 1984-2005/Jun 16
         (c) 2005 The Gale Group
File 608:KR/T Bus.News. 1992-2005/Jun 16
         (c) 2005 Knight Ridder/Tribune Bus News
File 620:EIU:Viewswire 2005/Jun 15
         (c) 2005 Economist Intelligence Unit
File 613:PR Newswire 1999-2005/Jun 16
         (c) 2005 PR Newswire Association Inc
File 621: Gale Group New Prod. Annou. (R) 1985-2005/Jun 16
         (c) 2005 The Gale Group
File 623:Business Week 1985-2005/Jun 09
         (c) 2005 The McGraw-Hill Companies Inc
File 624:McGraw-Hill Publications 1985-2005/Jun 15
         (c) 2005 McGraw-Hill Co. Inc
File 634:San Jose Mercury Jun 1985-2005/Jun 15
         (c) 2005 San Jose Mercury News
File 635:Business Dateline(R) 1985-2005/Jun 15
         (c) 2005 ProQuest Info&Learning
File 636:Gale Group Newsletter DB(TM) 1987-2005/Jun 16
         (c) 2005 The Gale Group
File 647:CMP Computer Fulltext 1988-2005/May W5
         (c) 2005 CMP Media, LLC
File 674:Computer News Fulltext 1989-2005/Jun W2
         (c) 2005 IDG Communications
File 810: Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
File 813:PR Newswire 1987-1999/Apr 30
```

(c) 1999 PR Newswire Association Inc

Set	Items	Description			
S1	692537	GEMSTONE? OR GEMS OR AMYTHEST OR DIAMOND??			
S2	487021	(LOCAT? OR IDENTIF? OR FIND? OR READING OR READS) (3N) (INFO-			
	RMATION OR INDICIA OR INDICIUM)				
s3	11732773	MANUFACTURER OR OWNER OR RETAILER OR SELLER?? OR PRODUCER?			
	OF	R MINE OR COUNTRY(2N)ORIGIN OR BRAND()NAME			
S4	15182443	NUMBER OR ID OR (IDENTIFICATION OR CERTIFICATION) () NUMBER??			
S5	16094803	LOGO OR SYMBOLS OR DESIGN? OR ALPHANUMERIC OR DATES OR MES-			
	SAGES				
S6	850279	COORDINATE? OR XY			
s7	5421	(AUTHENTICAT? OR CERTIF?) (3N) S1			
S8	9861	(PURITY OR QUALITY OR TYPE) (3N)S1			
S9	1978	(S1 OR S2) (3N) (SCANNING OR SCANNER OR LASER?)			
S10	1482758	NEAR()FIELD()OPTIC?? OR OPTIC?			
S11	289	(ETCH? OR MARKING OR MARKS OR MARKED OR INSCRIB?) (3N) S1 (3N-			
)(S3 OR S4 OR S5)				
S12	4	MICROSCOPIC (3N) S11			
S13	153	AU=(PATTON D? OR SPOONHOWER J? OR PATTON, D? OR SPOONHOWER,			
J?)					
S14	12264	MICROMACHIN?			
S15	2	RD S12 (unique items)			
S16	0	S11(S)S10			
S17	0	S11(5N)S2			
S18	40	S11(5N) (AUTHENTICAT? OR CERTIF? OR PURITY OR QUALITY OR TY-			
	PE)				
S19	40	S18 NOT S12			
S20	30	S19 NOT PY=>2002			
S21	16	RD S20 (unique items)			
S22	4055	S1 AND (S13 OR KODAK)			
S23	830	S22(S)(S4 OR S5)			
S24	830	S23(5N)(S4 OR S5)			
S25	0	S1 AND S13			

15/3,K/1 (Item 1 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
(c) 2005 The Gale Group. All rts. reserv.

02593331 Supplier Number: 24881927 (USE FORMAT 7 OR 9 FOR FULLTEXT)
GemSecure From IGL

(New program provides laser engraving of microscopic serial number for diamond identification)

National Jeweler, v 45, n 11, p 108

June 01, 2001

DOCUMENT TYPE: Journal ISSN: 0027-9544 (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 159

TEXT:

...diamond to be positively identified anywhere in the world via an international database. Finally, the diamond is laser-engraved with its own permanently inscribed microscopic serial number. The process takes approximately 3-5 days.

15/3,K/2 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

06600590 Supplier Number: 55609812 (USE FORMAT 7 FOR FULLTEXT)
The stone diaries. (includes related articles on diamonds) (Canada's diamond-selling business) (Industry Overview)

Ferry, Jon BC Business, v27, n7, p104(6) July, 1999

Language: English Record Type: Fulltext

Article Type: Industry Overview

Document Type: Magazine/Journal; Trade

Word Count: 2888

is a valuable fancy-colored pinkish stone, is possibly not.)
 * To guard against theft, same diamonds have microscopic
identification numbers laser- etched three microns deep on their
girdles. Diamonds from Canada's north bear a tiny polar bear.
 * Below the one-carat weight, stones...

?

15/7/2 (Item 1 from file: 16)
DIALOG(R) File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

06600590 Supplier Number: 55609812 (THIS IS THE FULLTEXT)
The stone diaries. (includes related articles on diamonds) (Canada's diamond-selling business) (Industry Overview)

Ferry, Jon BC Business, v27, n7, p104(6) July, 1999 TEXT:

DIAMOND MERCHANT COLIN FERGUSON TAKES US INSIDE THE CLOSED WORLD OF DIAMOND-SELLING - AND SHOWS YOU WHAT YOU NEED TO KNOW BEFORE YOU BUY

Ask Australian oil company director Ray Friend and his wife, Mary, what they think of Vancouver and they'll tell you it's a beautiful place, with charming people. In fact, the couple from Hobart, Tasmania decided to buy each other a couple of gold rings here for their coming 50th wedding anniversary. The Friends were staying in the West End, so Mary decided to do some comparison shopping at Saatchi & Saatchi Fine Jewellery & Persian Rugs on Robson Street.

There, she says she talked to the very charming Julio Saatchi who commented on what a nice diamond she was wearing. Mary says it was the 2.15-carat diamond her husband had given her for her 25th wedding anniversary. Saatchi, she says, admired the diamond (in an 18-carat white gold solitaire setting) and noted that the claws holding it in the ring were worn. He suggested Mary have them re-tipped. It was a job he could do for her, if she left it with him. Saatchi & Saatchi appeared to be a well-established operation in a salubrious part of town, so Mary thought nothing of leaving the ring there to be refurbished, even though it was uninsured.

A week later, this past March 15, Mary picked up the ring and after paying \$75 for the re-tipping work met her husband for lunch. The couple had a good look at the ring together. The only problem was that it didn't look right. It looked "a little bit offset." So they immediately had it checked out by a nearby jeweller, Fred Minichiello. "And he just looked at it and said, 'Oh that's not a diamond, that's a bit of paste, that's zircon,'" Mary told BCBusiness.

Zircon, otherwise known as Cubic Zirconia, is a diamond lookalike which does not have the hardness or sparkle of a real diamond. Fearing that someone had pulled the old switcheroo, the Friends called in the police. Then, after confirming Minichiello's finding with a gemologist and consulting with a lawyer, Mary launched a lawsuit against Saatchi & Saatchi for the loss of one of her most cherished possessions. "Not everybody has a \$55,000 ring, do they?"

Saatchi & Saatchi has denied "each and every allegation of fact" in the statement of claim Mary filed in B.C. Supreme Court. Julio Saatchi, son of owner Bob Saatchi, says it's not something he can talk about, except that the retailer is taking the case very seriously. "She's making up a story and it's not a true story and that's as much as I can give you." Saatchi adds: "All I can tell you is that our family has been in this business for the last six generations . . . and we have our reputation and everybody in Vancouver knows Saatchi & Saatchi as an honest jeweller."

Julio Saatchi says customers routinely leave very valuable diamonds at the family-run store, confident they will be secure. "This is a joke, you know, that's more or less, that's all I can say . . . It's a funny joke that some people like to make money out of." (Saatchi refers all further questions to top Vancouver lawyer David Gibbons of legal firm Gibbons Ritchie, who has been busy defending Premier Glen Clark against insinuations arising from perceptions of conflict of interest in the awarding of a lucrative casino licence to pal Dimitrios Pilarinos.)

In this disagreement, none of the allegations by Mrs. Friend has been

proven in court. But the case does serve to illustrate the dangers for both sides - consumer and jeweller - when it comes to dealing with such valuable items. Neither has much protection from the other.

As for the consumer, what should he know about protecting himself? The answer varies, depending on who you talk to. Diamond broker Colin Ferguson, owner of Diamonds Direct International, with offices in Vancouver and Antwerp, has some advice for anyone buying diamonds: be extremely careful. Diamonds are not for dummies. For one thing, Ferguson says, no one needs any qualifications to be a diamond dealer or even a diamond appraiser in Canada. And while diamonds may be a girl's best friend, Ferguson says the business attracts opportunists who are not necessarily anyone's best friend.

In fact, Ferguson advises people not to let their cherished stones out of their sight. He says it is possible to switch a mounted diamond in just half-an-hour. "I think there are a great deal of trustworthy jewellers out there. But don't by any expectation think it's prudent to walk into the corner jeweller and give them your . . . diamond and let them work on it, because really you don't know who you're dealing with." That is why, at his own heavily-secured office in downtown Vancouver, Ferguson lets customers watch through the glass as their diamond rings are being reset or repaired by his jewellers Jason, Richard and Todd.

Ferguson, 38, adds that it is hard, if not impossible, for diamond dealers to properly appraise and value a genuine diamond or almost any other gemstone without taking it out of its mount or setting. "When it's in a setting, it's impossible to tell actual colors, clarity, carat weight, the whole nine yards. It's impossible. How can you weigh a diamond when it's in a setting? How can you judge color? How can you judge clarity? It's impossible to do."

That advice has got Ferguson into hot water with the industry. In fact, when he gave that opinion in a television interview a couple of years ago, Ferguson found himself under investigation by Jewellers Vigilance Canada, an industry-funded watchdog group. "They were calling all over the country, saying that there was an investigation into me. I found about it first from a call from Antwerp."

Ferguson's interview with BCTV itself followed a U.S. television network expose by PrimeTime Live, ABC's investigative news magazine show, which found first-hand evidence of diamond-switching.

Reached by phone in Toronto, Jewellers Vigilance executive coordinator Carla Adams acknowledges that anybody can hang out a shingle as a diamond appraiser in Canada. She also concedes her organization investigated Ferguson, following complaints about his TV appearance. In fact, she says, he infuriated the industry. "Retailers and appraisers got upset with what he was saying because [the interview] was saying jewellers are there to steal your items, so be wary," she says. "And that's untrue and unfair." However, Adams would not discuss the probe's results, claiming they were confidential.

Adams describes diamond-switching as a small problem for the industry. "It's not as major as Colin makes it out to be, I don't think." She adds it is very difficult for consumers to follow Ferguson's advice not to let their diamonds out of their sight. "I'm well aware of one of the top appraisers in Canada and they do not let people into their lab, no matter what."

Jewellers Vigilance fields some 1,000 complaints a year, 65 per cent of which come from consumers, the remainder from the trade itself. (This year, the number of complaints has risen as a result of the appearance of a synthetic diamond called moissanite, manufactured in South Carolina.) The most common complaint her organization handles revolves around jewelry appraisals. Adams herself believes there should be a regulation requiring diamond appraisers to have some certification: "I'm sure it would help, definitely."

Veteran Vancouver diamond dealer Toni Cavelti says he would like to

see jewelry appraisers commit to some kind of testing. But he disagrees that removing diamonds from their settings is the best way to appraise them, as suggested by Ferguson. It may appear to be the best in theory, he says, but diamond removal is generally too impractical and expensive. Also, there's a greater chance of a mixup occurring when a diamond is separated from its mount. "So, no, you don't remove stones," Cavelti says. "It is standard in the industry everywhere internationally; you appraise it in the setting." Besides, Cavelti says, 99 per cent of the people in the industry work very hard to make an honest living.

Cavelti insists he has never personally encountered a case of diamond-switching. "I do not know of even one case in all my years in business where either a competitor or a friend of mine or anybody in the diamond business has actually exchanged a gemstone for another one or cheated a customer in that way, no."

Earlier this year, Cavelti sold his West Georgia Street store to Henry Birks & Sons. But, in the past, he has had customers demand to be present while he removed their stones to put them in new settings. "And my standard answer was, 'If you don't have more faith in me, I don't think we should do business'." Cavelti adds that, if he was to be leery about leaving diamonds with anybody, "it would be with someone upstairs in a nonmarked kind of surrounding, that is where I would be careful."

Ferguson, whose upstairs office is discreetly tucked away in the Rogers Building on Granville Street, denies he is out to attack anyone. His comments to BCTV were simply a response to a reporter's questions. But the industry is prickly and does not take criticism well. In fact, he says he has received several threats, including a death threat earlier this year. Security is a big concern. Diamonds Direct, which houses diamonds worth hundreds of thousands of dollars, is heavily protected. "We're out of the way on purpose," says Ferguson. "We don't put an address in the phone book. We don't see people that we don't know." The office contains two safes weighing a ton apiece, double-doors, bulletproof glass, seismic and motion detectors and other unspecified security measures.

At age 25, Ferguson worked as a photocopier salesman before winding up in the jewelry business. At a desperate stage in his life, he says he literally got down on his knees and begged a South African diamond dealer to give him a stone to sell within 30 days. The dealer was kind enough to oblige. He sold that diamond that day to a jeweller and bought more diamonds with the money. The gamble paid off, and he has never looked back.

Ferguson will not reveal the annual revenue of Diamonds Direct. But he notes it is more than \$1 million annually, the minimum requirement for membership in the Young Entrepreneurs Organization. He says stories about him abound, but insists he has never been in trouble with the law and that the Better Business Bureau of the Lower Mainland of B.C. has never had a complaint about him. It's a fact the BBB confirms.

BBB statistics show that in 1998 the bureau fielded nine complaints about jewellers. As of April of this year, it had received eight complaints. Given that it is an exhausting process to stickhandle your way through the BBB's telephone-answering system, that number of complaints may well represent the tip of a substantial degree of customer dissatisfaction. BBB general manager Valerie MacLean herself notes that, although the number of complaints about jewelry stores is not huge, the complaints themselves tend to be "serious" because the items tend to be valuable and have high sentimental value.

The BBB says it did receive two complaints about Saatchi & Saatchi in 1997 and a further one in 1998. BBB complaint counsellor Ashlene Prasad says none of the complaints involved diamond-switching. However, two involved alleged "misrepresentation" of the quality of the jewelry being sold. "One of them had to do with the grade of the diamond," Prasad says. The third complaint was about "unsatisfactory or poor workmanship" on a diamond ring Saatchi & Saatchi had made. The Robson Street diamond retailer resolved one of the three complaints (about quality). However, two of the

complaints were closed as "unresolved". On June 11 last year, the board of the BBB's complaint committee cancelled the company's membership for violation of the bureau's code of ethics.

The BBB's MacLean confirms the bureau had enough concerns about the business practices of Saatchi & Saatchi for it to refer the case to the BBB's complaints committee. "In this case, the complaints committee terminated the membership of the company. That's the most serious of the four actions that could be taken," MacLean says. She adds that this information is part of the public record.

However, Julio Saatchi maintains the company deliberately dropped its membership in the BBB. "We cancelled it ourself... They were nothing but a headache for us." This followed a complaint from a customer who ordered a diamond engagement ring and then wanted a refund. Says Saatchi: "They wanted to get their money back and, because the ring was custom-made for them, we couldn't refund the money."

Ferguson, who talks of plans to become the world's largest Internet diamond dealer, believes the diamond buyer's best friend is good information - a rather rare commodity.

He thinks the big issue is public accountability: "I think the public has a right to be able to buy diamonds and to know that they're not going to be switched." The Vancouver diamond broker himself is clearly quite outgoing, but he points out that one of the problems with the jewelry business is that for centuries it has been cloaked in secrecy. "I think it's a very jealous industry and it's very thin-skinned."

However, he does think consumers are gradually becoming better informed. "Just the fact that [Mary Friend] chose to take legal action against this jeweller, I think means a lot." He cautions, though, that diamond-switching tends to be very hard to prove.

Meanwhile, Mary Friend says the incident has left her feeling very foolish. Her husband Ray, a director of oil exploration firms Petrolex Energy and Naflex Energy, says it has colored his feelings about Vancouver. "It certainly has put a bad taste in our mouth as far as Vancouver's concerned. But not all of Vancouver. We've loved it here, the people have been delightful. Such a beautiful place."

THE DIRT ON DIAMONDS

Fred Cuellar, an author billed as one of America's top diamond experts and advisor on gemstone investment to the Saudi Royal Family, says there are many honest diamond dealers. Unfortunately, there are many dishonest ones too. There are also a lot of myths about diamonds. A diamond, he says, is not necessarily forever. If you don't take care of it, it can chip, fracture or break. Also, diamonds are not very rare. It's just that the numbers on the market are controlled by the big diamond cartels to keep prices artificially high. Says Cuellar: "There are really enough diamonds to give each man, woman and child in the United States a whole cupful."

Diamonds are not even the most expensive gemstones. A top-quality ruby, for example, can be worth more than US\$30,000 a carat. Furthermore, diamonds are not always a girl's best friend. Some women think they are a waste of money. In fact, diamonds are not a particularly good investment for the average person. "For the average Joe, I would recommend buying a diamond for the enjoyment and prestige it brings and don't be too concerned about making a buck," Cuellar advises in his book How to Buy a Diamond (Sourcebooks, Naperville, Illinois). Instead, he notes that diamonds are basically an expression of romance, love, glamor, elegance, wealth and refinement. But they are also a commodity from which some dealers try to make as much money as they can, and dishonest ones can fool you in a hundred ways.

FAST FACTOIDS

A diamond's color is rated against 23 recognized color graduations, from white D to the less-desired black Z. Unless gauged against a 'master stone' or by Gemological Institute of America, the exact graduation is

subjective; it's literally in the eye of the beholder.

* Color, clarity, cut, carat weight: DeBeers recognizes 5,000 different grades and permutations. A 'simple' diamond is a misnomer.

- * Like any gem, diamonds can be 'enhanced' chemicals introduced through tiny laser-bored holes to bleach out inclusions, cleavages or 'feathers' filled with glass epoxy, the surface coated to 'improve' the color, the very color itself changed via the exotic (nuclear bombardment to change the atomic matrix) to the prosaic (a line of indelible blue ink around the diamond's girdle) to alter yellowish or brownish tinges to the more valuable blue-white.
- $\,\,^*$ One carat weighs 1/142 of an ounce. Conversely, 142 one-carat diamonds weigh one ounce. If flawless D-white, that ounce would wholesale at US\$2.34 million.
- * A cut diamonds true color can only be gauged from the bottom; viewed from the front, you see light reflected from the surroundings. (What you think is a valuable fancy-colored pinkish stone, is possibly not.)
- * To guard against theft, same diamonds have microscopic identification numbers laser- etched three microns deep on their girdles. Diamonds from Canada's north bear a tiny polar bear.
- * Below the one-carat weight, stones are measured in points (100 to the carat). Which makes a small diamond much easier to promote, as against describing it in the somewhat deflating fractions of a carat.
- * A poor cut reduces the diamond's 'fire' and can edge upon . fraudulent. Example: deliberately leaving a 'thick' girdle to boost the weight at the expense of the brilliance. Result: a falter but intrinsically less valuable 'swindled' stone.

Jon Ferry is a contributing editor to BCBusiness who doesn't wear diamonds.

COPYRIGHT 1999 Canada Wide Magazine Ltd. (Canada) COPYRIGHT 1999 Gale Group

21/3,K/1 (Item 1 from file: 9)

DIALOG(R)File 9:Business & Industry(R)

(c) 2005 The Gale Group. All rts. reserv.

02613721 Supplier Number: 25044385 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Diamond Trade Jumps on the Branding Bandwagon.

(New trend toward branding diamonds is discussed)

National Jeweler, v 45, n 21, p 42(2)

November 01, 2001

DOCUMENT TYPE: Journal; Industry Overview ISSN: 0027-9544 (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 2426

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...to have an exclusive United States distributorship. Cut and polished in Canada by Deton'cho **Diamonds**, the stones come **inscribed** with a **number** from its **certificate** of authenticity, which is issued by Canada's Northwest Territories government. Tundra Diamonds are also...

21/3,K/2 (Item 2 from file: 9)

DIALOG(R)File 9:Business & Industry(R)

(c) 2005 The Gale Group. All rts. reserv.

02597344 Supplier Number: 25012458 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Zales Introduces Eight-Sided Diamond

(Zales diamond features platinum setting with Zales name engraved on inside of the ring)

National Jeweler, v 45, n 19, p 22

October 01, 2001

DOCUMENT TYPE: Journal ISSN: 0027-9544 (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 322

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...carat weight of a Zales diamond and provides an independent appraisal of every stone. The **diamond** 's unique **certification number** is laser-inscribed on the stone.

In addition, GemEx Systems provides light performance analysis, which explains how well...

21/3,K/3 (Item 3 from file: 9)

DIALOG(R)File 9:Business & Industry(R)

(c) 2005 The Gale Group. All rts. reserv.

02597331 Supplier Number: 24946770 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Ben-Dor's 'Tundra' Stones

(M Ben-Dor Diamonds debuts Tundra diamonds, which are mined, cut and polished in the Northwest Territories, Canada)

National Jeweler, v 45, n 15, p 20

August 01, 2001

DOCUMENT TYPE: Journal ISSN: 0027-9544 (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 401

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...government's stringent standards, are eligible for certification. The document includes a "gemprint" of the diamonds and an individual certificate number will be laser inscribed onto each stone. All Tundra diamonds will be dual certified, as they will also bear a Gemological Institute of America report certificate.

"The Canadian government...

21/3,K/4 (Item 4 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
(c) 2005 The Gale Group. All rts. reserv.

02508408 Supplier Number: 24909225 (USE FORMAT 7 OR 9 FOR FULLTEXT) Ekati to 'Brand' Its Diamonds

(Diamonds to be laser-inscribed with 'maple leaf' logo)

Jewelers' Circular-Keystone, v 172, n 7, p 54

July 2001

DOCUMENT TYPE: Journal ISSN: 1070-0242 (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 238

TEXT:

...possibility, says Ekati spokesman Graham Nicholls. Approximately 20 Canadian retailers have agreed to sell the ${\tt diamonds}$, which will be laser- ${\tt inscribed}$ with Ekati's "maple leaf" ${\tt logo}$.

The stones carry three **certificates**. The first, from the AGS lab, documents the diamond's specifications. The second, from the...

21/3,K/5 (Item 5 from file: 9)

DIALOG(R) File 9: Business & Industry(R)

(c) 2005 The Gale Group. All rts. reserv.

02497374 Supplier Number: 24916236 (USE FORMAT 7 OR 9 FOR FULLTEXT) BHP acquires Dia Met, boosts stake in Ekati

(BHP extends takeover bid of Dia Met Minerals; structure of all-share takeover offer; impact of deal)

Northern Miner, v 87, n 19, p 1+

July 02, 2001

DOCUMENT TYPE: Journal ISSN: 0029-3164 (Canada)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 1511

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...first diamond mine to brand its own premium-quality polished diamonds and also guarantee their quality and country of origin through government certification. Each Ekati-brand diamond will be laserinscribed with the Ekati maple leaf logo, the Ekati name and an individual certificate number.

In the year ended Jan. 31, 2001...

21/3,K/6 (Item 6 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
(c) 2005 The Gale Group. All rts. reserv.

02429684 Supplier Number: 24823364 (USE FORMAT 7 OR 9 FOR FULLTEXT)
BHP, DIA MET MINERALS LAUNCH EKATI BRAND DIAMONDS AND GEMS
(Ekati diamond mining operation of BHP, Dia Met Minerals is first in the world to launch branded diamonds)

AsiaPulse News, p n/a

April 12, 2001

DOCUMENT TYPE: Custom Wire (Southern & Eastern Asia)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 237

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...With Ekati brand diamonds both the origin and the quality of each gemstone is thoroughly ${\tt certified}$."

He said each Ekati brand diamond will be laser inscribed with the Ekati maple leaf logo, the Ekati name and an individual identification and certification number.

In addition, each stone will...

21/3,K/7 (Item 1 from file: 15)

DIALOG(R) File 15:ABI/Inform(R)

(c) 2005 ProQuest Info&Learning. All rts. reserv.

01681183 03-32173

De Beers' brand a gem of an idea

Anonymous

Marketing Week v2ln20 PP: 3 Jul 16, 1998

ISSN: 0141-9285 JRNL CODE: MWE

WORD COUNT: 476

...TEXT: novel branding idea. Top quality gems are now to receive a De Beers marque of **quality**, together with a serial **number**, **inscribed** not on the **diamond** itself (which would damage its value) but on a transparent film attached to it. At...

21/3,K/8 (Item 1 from file: 16)

DIALOG(R) File 16: Gale Group PROMT(R)

(c) 2005 The Gale Group. All rts. reserv.

09245003 Supplier Number: 80457555 (USE FORMAT 7 FOR FULLTEXT)

Canada's Growing Diamond Industry, in an Advisory by Industrialinfo.com.

Business Wire, p4686

Nov 30, 2001

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 448

... in Canada.

Canadian diamonds are in increasingly high demand due to consumer concerns over illegal diamonds from Angola and Sierra Leon. Some of the

diamonds are etched with a tiny polar bear certifying their country of origin as Canada. Diamonds from the Ekati mine are laser inscribed with a trademark maple leaf to indicate their authenticity.

Industrialinfo.com provides daily news related...

21/3,K/9 (Item 2 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

06727602 Supplier Number: 56451676 (USE FORMAT 7 FOR FULLTEXT) Ashford.com Adds Diamonds to Luxury Retail Site.

PR Newswire, p1457

Oct 18, 1999

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 830

... EGL) and comes with a 30-day, money-back guarantee.

Ashford.com is the first retailer of diamonds to offer the grading certificate number and company logo micro inscribed on the girdle of virtually every diamond .5 carats and above. This inscription, which is visible only under high magnification and does...

21/3,K/10 (Item 3 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

06546627 Supplier Number: 55379099 (USE FORMAT 7 FOR FULLTEXT)
Bailey Banks & Biddle Fine Jewelers, a Division of Zale Corporation Offers
De Beers Millenium Diamond.

Business Wire, p0041

August 9, 1999

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 402

... then cut to the very highest standard and most exacting specifications by master craftsmen. To authenticate each stone, De Beers will inscribe the diamonds with a registered number and the De Beers brandmark name. The unique inscription is only visible using the state...

21/3,K/11 (Item 1 from file: 20)
DIALOG(R)File 20:Dialog Global Reporter
(c) 2005 The Dialog Corp. All rts. reserv.

16147753 (USE FORMAT 7 OR 9 FOR FULLTEXT) BHP, Dia Met launches Ekati brand of diamonds AAP NEWS

April 12, 2001

JOURNAL CODE: WAAP LANGUAGE: English RECORD TYPE: FULLTEXT WORD COUNT: 262

(USE FORMAT 7 OR 9 FOR FULLTEXT)

 \dots With Ekati brand diamonds both the origin and the quality of each gemstone is thoroughly ${\tt certified}$."

He said each Ekati brand diamond would be laser inscribed with the

Ekati maple leaf logo , the Ekati name and an individual identification and certification number.

In addition, each stone will...

21/3,K/12 (Item 2 from file: 20) DIALOG(R) File 20: Dialog Global Reporter (c) 2005 The Dialog Corp. All rts. reserv.

16118286 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Ekati (TM) becomes the first diamond mine in the world to brand and certify origin of its own top gemstones

CANADA NEWSWIRE April 11, 2001

LANGUAGE: English RECORD TYPE: FULLTEXT JOURNAL CODE: WCNW

WORD COUNT: 681

(USE FORMAT 7 OR 9 FOR FULLTEXT)

getting. The Ekati(TM) certification process addresses this, guaranteeing without a doubt the origin and quality of the diamonds ."

Each Ekati(TM) brand diamond will be laser inscribed with the "maple leaf" logo , the Ekati(TM) name and an individual identification and certificate number.

Also, each stone will...

(Item 3 from file: 20) 21/3,K/13

DIALOG(R) File 20: Dialog Global Reporter (c) 2005 The Dialog Corp. All rts. reserv.

08787390 (USE FORMAT 7 OR 9 FOR FULLTEXT)

The Florida Times-Union, Jacksonville, Retail Report

Peralte C. Paul

TRIBUNE BUSINESS NEWS (FLORIDA TIMES-UNION -KRTBN KNIGHT-RIDDER JACKSONVILLE, FLORIDA)

December 20, 1999

JOURNAL CODE: KFTU LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 447

(USE FORMAT 7 OR 9 FOR FULLTEXT)

ask for what's called an IGI certificate to come with your purchase diamond identification number be inscribed into the stone. and a All diamonds that are IGI certified are placed on a worldwide database so you can check the authenticity of your purchase...

(Item 4 from file: 20) 21/3,K/14

DIALOG(R) File 20: Dialog Global Reporter

(c) 2005 The Dialog Corp. All rts. reserv.

02224354 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Leader: De Beers' brand a gem of an idea

MARKETING WEEK, p3

July 16, 1998

JOURNAL CODE: FMWK LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 482

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... novel branding idea. Top quality gems are now to receive a De Beers marque of quality, together with a serial number, inscribed not on the diamond itself (which would damage its value) but on a transparent film attached to it. At...

21/3,K/15 (Item 1 from file: 553)
DIALOG(R)File 553:Wilson Bus. Abs. FullText
(c) 2005 The HW Wilson Co. All rts. reserv.

04569105 H.W. WILSON RECORD NUMBER: BWBA01069105 (USE FORMAT 7 FOR FULLTEXT)

Going to the market.

AUGMENTED TITLE: De Beers' Diamond Trading Company Supplier of Choice plan Benson, Steven

New York Diamonds v. 64 (May 2001) p. 16-20

LANGUAGE: English WORD COUNT: 2778

(USE FORMAT 7 FOR FULLTEXT)

TEXT

... not new to the marketing game. For several years already it has been branding its diamonds as the Premier Gem Collection, inscribing a logo and the GIA certificate number on to the stones. But it is expanding the scope of its downstream activity...

21/3,K/16 (Item 1 from file: 813)

DIALOG(R) File 813:PR Newswire

(c) 1999 PR Newswire Association Inc. All rts. reserv.

1197427 CHTU016

Diamonds Direct, USA Says Knowledge Can Save Consumers Thousands When Purchasing Diamonds During the Holiday Season

DATE: December 9, 1997 13:53 EST WORD COUNT: 778

...letter, from D - colorless - to Z light yellow. Less color is better.

-- Clarity describes the **purity** of the **diamond**, and most **diamonds** contain

tiny natural ${\tt marks}$ called inclusions. The ${\tt number}$ of inclusions, their

size, nature and location all affect the diamond's clarity grade. Most...

(Item 2 from file: 16) DIALOG(R) File 16: Gale Group PROMT(R) (c) 2005 The Gale Group. All rts. reserv.

Supplier Number: 56451676 (THIS IS THE FULLTEXT) Ashford.com Adds Diamonds to Luxury Retail Site. . PR Newswire, p1457 Oct 18, 1999

TEXT:

Each Diamond GIA or EGL Certified With a 30-Day, Money-Back Guarantee; Micro Inscription Provides Lifetime Customer Security

HOUSTON, Oct. 18 /PRNewswire/ -- Ashford.com (Nasdaq: ASFD), a leading Internet retailer of luxury and premium products, today added diamonds to its retail site, located at http://www.ashford.com . Each diamond available on the site is certified by the Gemological Institute of America (GIA) or the European Gemological Laboratory (EGL) and comes with a 30-day, money-back guarantee.

Ashford.com is the first retailer of diamonds to offer the grading certificate number and company logo micro inscribed on the girdle of virtually every diamond .5 carats and above. This inscription, which is visible only under high magnification and does not detract from the beauty, brilliance or value of the diamond, provides permanent and easy identification for appraisal or verification purposes, and virtually eliminates the possibility of diamond switching. This inscription also allows Ashford.com to keep a permanent record of the customer's diamond in the event of damage or loss and allows the customer to trade in his or her diamond with Ashford.com at later date.

"At Ashford.com, we know what a special event it is to buy a diamond, and we want to make sure that every diamond customer on our site feels confident and comfortable in their purchase," said Kenny Kurtzman, CEO of Ashford.com. "With our team of gemologists and diamond professionals, we offer the highest degree of attention, service, quality and value to our customers. We want to go the extra distance for each customer in his or her diamond purchase, even if it means taking the diamond out of the vault to describe to the customer personally."

Ashford.com has a team of gemologists and experienced diamond professionals, who are available by email, phone and live chat to answer questions and to walk customers through their diamond purchase. In addition, this team of professionals can actually guide a customer's Web browser to display various diamonds as they are being discussed, through the Acuity WebCenter(TM) solution's synchronized browser capability.

Ashford.com keeps an extensive inventory of diamonds on site. This on-site inventory provides customers with a number of benefits, including a huge selection of diamonds, ranging in size from slightly under .5 carats to more than 3.0 carats. Ninety-nine percent of the diamonds offered on Ashford.com are already in stock and ship within 24 hours.

Ashford.com offers the following additional benefits with its diamonds:

-- GIA or EGL certification -- Each stone is certified by the GIA or EGL, the two most widely trusted labs among diamond professionals. These labs guarantee each diamond's color, clarity, cut and carat weight with a certificate of grading. The certificates plot and map the specific "fingerprints" in each diamond.

-- Diamond display techniques -- A photograph of each diamond is displayed on the site, and customers can compare diamonds side by

side

as if they were in a diamond house. Customers can search and view diamonds by shape, quality, size and price.

-- 30-day money-back guarantee -- The Ashford.com 30-day, money-back guarantee is among the strongest in the industry. If desired, customers can use these 30 days to get their diamond independently

appraised.

-- Complimentary Tiffany(R)-style mounting -- Ashford.com ships each diamond mounted in a beautiful, solid 14-karat white or yellow gold Tiffany(R)-style mounting at no extra charge. To complete this impressive presentation, each mounted solitaire diamond from Ashford.com comes packaged in a beautiful ring box.
-- Complimentary one-year insurance coverage -- Ashford.com

automatically provides one year of insurance coverage provided by Jeweler's Mutual on all diamond purchases, protecting customers in

the

case of loss or theft.

-- Complimentary independent appraisal -- Each diamond is appraised

by to

an independent appraisal lab to determine its replacement value and

verify that the diamond and grading certificate match.

-- Trade-in policy for Ashford.com diamonds -- Customers can trade in their Ashford.com diamonds at any time and receive full value when purchasing a diamond of 50% greater retail value or more.

-- Complimentary Ashford.com loupe -- Each diamond ships with a standard jeweler's loupe, so that customers can see the diamond's beauty and personalized pedigree.

In related announcements today, Ashford.com also detailed its plans to enter the jewelry category and revealed a partnership with the International Jewelry Design Guild. See http://www.ashford.com/presscenter/pressreleases for details.

About Ashford.com

Ashford.com is an Internet retailer of luxury and premium products. The company's e-commerce site, located at http://www.ashford.com, offers more than 10,000 styles of new and vintage watches, fragrances, leather accessories, sunglasses and writing instruments from more than 200 leading brands. Dedicated to creating a comfortable and safe shopping environment, Ashford.com offers customers the Ashford.com Protection Plus(TM) policy, which provides best-in-industry warranties, privacy and security. A member of the Better Business Bureau Online, Ashford.com is headquartered in Houston, Texas.

"Tiffany" is a registered trademark of Tiffany & Co. Ashford.com is not affiliated with Tiffany & Co.

COPYRIGHT 1999 PR Newswire Association, Inc.

COPYRIGHT 1999 Gale Group

? t21/7/13

21/7/13 (Item 3 from file: 20)

DIALOG(R) File 20:Dialog Global Reporter (c) 2005 The Dialog Corp. All rts. reserv.

08787390 (THIS IS THE FULLTEXT)

The Florida Times-Union, Jacksonville, Retail Report

Peralte C. Paul

KRTBN KNIGHT-RIDDER TRIBUNE BUSINESS NEWS (FLORIDA TIMES-UNION - JACKSONVILLE, FLORIDA)
December 20, 1999

UPSCALE, FAMILY EATERY OPENS AT WORLD GOLF VILLAGE: Steaks, fresh vegetables and homemade peach cobbler are just a few of the staples that make up Marvin's Steaks & Barbecue, the restaurant that opened recently at the World Golf Village.

The 170-seat, 5,400-square-foot lakefront restaurant is an upscale, family eatery with a golf theme, said owner Marvin C. Harris Jr. The eatery, which has a full-service bar, also serves ribs, chops, a limited seafood menu and offers catering services.

Harris, a Jacksonville native and a former McDonald's franchise owner in Pompano Beach and Texas, said he settled on the World Golf Village because he sees it as an area that's primed for explosion.

"I see it as another Disney World in a few years," he said. Since the Dec. 2 opening, Marvin said the restaurant has been well received and will add breakfast to the menu next month.

In the meantime, he said he's scouting areas on the Northside and in Ponte Vedra Beach to open two other locations.

ALL THAT GLITTERS: Marilyn Monroe cooed that diamonds are a girl's best friend, but if you're planning on purchasing them online this holiday season, the International Gemmological Institute reminds consumers that a fool and his money are easily parted.

Online diamond buying is a tad riskier because consumers won't necessarily know the history behind an online e-tailer in the way they will a brick-and-mortar store, the IGI says. But there are a few ways to protect yourself from ending up with lump of coal instead of a dazzling rock:

First, when ordering online, always ask for what's called an IGI certificate to come with your purchase and a diamond identification number be inscribed into the stone. All diamonds that are IGI certified are placed on a worldwide database so you can check the authenticity of your purchase.

Jerry Ehrenwald, IGI president, said it serves to protect e-tailers as well consumers, because if a return is made, the merchant knows he's getting back what he shipped.

With high-end online jewelry sales being a relatively new segment of Internet retailing, Ehrenwald suggests that consumers should go with sites with which they are familiar. Several established jewelry retailers, such as Tiffany & Co., have Web sites, and some consumers may feel more comfortable with an e-tailer that operates brick-and-mortar stores.

If you're still uncertain about a particular e-tailer or retailer for that matter, try calling the local Better Business Bureau chapter that covers the location where the merchant is based, he said.

CEDAR RIVER FLOWS TO BEACH BOULEVARD: Cedar River Seafood & Oyster Bar has moved to 8550 Beach Blvd., one mile west of Southside Boulevard in the former Jimmie's Buttermilk Chicken.

Copyright 1999 Knight-Ridder/Tribune Business News. Source: World Reporter (Trade Mark) - Knight-Ridder Tribune Business News.

```
File
       2:INSPEC 1969-2005/Jun W1
         (c) 2005 Institution of Electrical Engineers
       6:NTIS 1964-2005/Jun W1
File
         (c) 2005 NTIS, Intl Cpyrght All Rights Res
       8:Ei Compendex(R) 1970-2005/Jun W1
File
         (c) 2005 Elsevier Eng. Info. Inc.
      34:SciSearch(R) Cited Ref Sci 1990-2005/Jun W1
File
         (c) 2005 Inst for Sci Info
      35:Dissertation Abs Online 1861-2005/May
File
         (c) 2005 ProQuest Info&Learning
      65:Inside Conferences 1993-2005/Jun W2
File
         (c) 2005 BLDSC all rts. reserv.
      94:JICST-EPlus 1985-2005/Apr W4
File
         (c) 2005 Japan Science and Tech Corp(JST)
File
      95: TEME-Technology & Management 1989-2005/May W2
         (c) 2005 FIZ TECHNIK
      99: Wilson Appl. Sci & Tech Abs 1983-2005/May
File
         (c) 2005 The HW Wilson Co.
File 144: Pascal 1973-2005/Jun W1
         (c) 2005 INIST/CNRS
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File 583: Gale Group Globalbase (TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group
File 603: Newspaper Abstracts 1984-1988
         (c) 2001 ProQuest Info&Learning
File 483: Newspaper Abs Daily 1986-2005/Jun 07
         (c) 2005 ProQuest Info&Learning
File 248:PIRA 1975-2005/May W5
         (c) 2005 Pira International
Set
        Items
                 Description
       196936
                 GEMSTONE? OR GEMS OR AMYTHEST OR DIAMOND??
S1
                 (LOCAT? OR IDENTIF? OR FIND? OR READING OR READS) (3N) (INFO-
S2
             RMATION OR INDICIA OR INDICIUM)
S3
                 MANUFACTURER OR OWNER OR RETAILER OR SELLER?? OR PRODUCER?
             OR MINE OR COUNTRY (2N) ORIGIN OR BRAND () NAME
S4
      3619137
                 NUMBER OR ID OR (IDENTIFICATION OR CERTIFICATION) () NUMBER??
S5
      5687208
                 LOGO OR SYMBOLS OR DESIGN? OR ALPHANUMERIC OR DATES OR MES-
             SAGES
       490873
S6
                 COORDINATE? OR XY
S7
          244
                 (AUTHENTICAT? OR CERTIF?) AND S1
S8
        30705
                 (PURITY OR QUALITY OR TYPE) AND S1
                 (S1 OR S2) (3N) (SCANNING OR SCANNER OR LASER?)
S9
         4984
                 NEAR()FIELD()OPTIC?? OR OPTIC?
S10
      3176657
          752
                 (ETCH? OR MARKING OR MARKS OR MARKED OR INSCRIB?) AND S1 A-
S11
             ND (S3 OR S4 OR S5)
            2
                MICROSCOPIC (3N) S11
S12
                AU=(PATTON D? OR SPOONHOWER J? OR PATTON, D? OR SPOONHOWER,
         1214
S13
              J?)
        58693
                MICROMACHIN?
S14
$15
           22
                S9 AND S3
S16
           20
                 S15 NOT PY=>2002
           15
                RD S16 (unique items)
S17
          173
                 S11 AND S10
S18
            0
                 S18 AND (AUTHENTICAT? OR CERTIF?)
S19
            0
                 S18 AND S2
S20
           13
                 S18 AND S14
S21
                S21 NOT S16
S22
           13
                 S22 NOT PY=>2002
S23
           10
S24
            9
                RD S23 (unique items)
```

į.

S25	4	S24 NOT (SEMICONDUCTOR? OR THIN() FILM? OR FILM? OR WAFERS)
S26	2	RD S12 (unique items)
S27	0	S13 AND S11
S28	0	S13 AND S1
S29	22	(S7 OR S8) AND S6 AND LASER?
s30	21 -	S29 NOT PY=>2002
S31	14	RD S30 (unique items)
S32	8	S31 NOT (SILICON OR WAFERS OR THIN()FILMS OR FILMS)
S33	. 8	S32 NOT (S12 OR S17 OR S25)
		'
•		

•

17/3,K/1 (Item 1 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

INSPEC Abstract Number: C9412-3310E-001

Title: Using laser range data to model tunnel curvature for the automatic guidance of a mining vehicle

Author(s): Juneau, L.; Huteau, R.; Freedman, P.; Chevrette, G.

Author Affiliation: Dept. of Electr. & Comput. Eng., Ecole Polytech. de Montreal, Que., Canada

p.643-8 vol.2 Part vol.2

Publisher: IEEE, New York, NY, USA

1993 Country of USA 2 vol. Publication: Publication Date: (xviii+viii+982) pp.

ISBN: 0 7803 0908 1

U.S. Copyright Clearance Center Code: CH3243-3/93/0000-0643\$1.00

Conference Title: Proceedings of IEEE International Conference on Control and Applications

Conference Sponsor: IEEE Control Syst. Soc

Conference Date: 13-16 Sept. 1993 Conference Location: Vancouver, BC, Canada

Language: English

Subfile: C

paper presents an automatic guidance system for Abstract: The semi-structured environments such as mine tunnels. This system uses a finder to obtain information about the environment. In laser range order to guide the vehicle properly, a perception system estimates, from... ... Identifiers: mine tunnels

17/3,K/2 (Item 2 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

02728599 INSPEC Abstract Number: B86053265

Title: Evaluation of multiple up circuit separation techniques

Author(s): Lichtenberg, L.R.; Muir, T.L.

Author Affiliation: Motorola Gov. Electron. Group, Scottsdale, AZ, USA Conference Title: Proceedings of the 1985 International Symposium on Microelectronics p.235-8
Publisher: Int. Soc. Hybrid Microelectron, Reston, VA, USA

Publication Date: 1985 Country of Publication: USA

ISBN: 0 930815 13 0

Conference Sponsor: Int. Soc. Hybrid Microelectron.

Conference Date: 11-14 Nov. 1985 Conference Location: Anaheim, CA, USA

Language: English

Subfile: B

Abstract: Both thick and thin film hybrid microcircuit producers use large superstrate ceramics for multiple up production techniques to achieve lower costs in producing...

... of thick or thin film circuits on ceramic substrates. This study evaluated the following processes. Laser scribing; Diamond sawing; Diamond scribing.

(Item 1 from file: 8) 17/3,K/3 DIALOG(R)File 8:Ei Compendex(R)

(c) 2005 Elsevier Eng. Info. Inc. All rts. reserv.

03505616 E.I. Monthly No: EI9211140234

Title: Surface modification and measurement using a scanning tunneling microscope with a diamond tip.

Author: Bogy, D. B.

Corporate Source: Univ of California, Berkeley, CA, USA

Source: Journal of Tribology, Transactions of the ASME v 114 n 3 Jul 1992 p 493-498

Publication Year: 1992

CODEN: JOTRE9 ISSN: 0742-4787

Language: English

... Abstract: is used to modify and measure the surface of magnetic media disks. A very rugged diamond tip allows continued scanning after it has severely scratched or punched the surface. Three techniques are used. First a...

...location and depth can be obtained by using a new software developed by the STM manufacturer to push the tip into the surface with the piezoelectric scanner. The control of the...

Identifiers: SCANNING TUNNELING MICROSCOPE; INDENTATION; DIAMOND TIP

17/3,K/4 (Item 2 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

(c) 2005 Elsevier Eng. Info. Inc. All rts. reserv.

03041027 E.I. Monthly No: EI9104046600

Title: Dialaser blades from Pianezza.

Author: Veglio, Oreste

Corporate Source: HS Veglio s.r.l., Pianezza, Italy

Source: Industrial Diamond Review v 49 n 534 May 1989 P 213

Publication Year: 1989

CODEN: INDRA9 ISSN: 0019-8145

Language: English

...Abstract: for dry cutting of stone and construction materials, it will only be possible to sell laser welded diamond saw blades. HS Veglio is selling such blades under the Dialaser brand name. Tests conducted on building sites and in industrial laboratories have shown that a laser welded...

17/3,K/5 (Item 3 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

(c) 2005 Elsevier Eng. Info. Inc. All rts. reserv.

02344214 E.I. Monthly No: EI8712121606

Title: PRECISION DIAMOND MACHINING.

Author: Anon

Source: Industrial Diamond Review v 47 n 520 1987 p 106

Publication Year: 1987

CODEN: INDRA9 ISSN: 0019-8145

Language: ENGLISH

...Abstract: USA, Bryant Symons Co. Ltd. in England, Toyoda Machine Works in Japan and other leading **producers**, for the 'mirror machining' of such components as: computer magnetic memory disc substrates; convex mirrors...

... Descriptors: Diamond; LASERS, CARBON DIOXIDE

17/3,K/6 (Item 4 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
(c) 2005 Elsevier Eng. Info. Inc. All rts. reserv.

02338814 E.I. Monthly No: EI8712121137 Title: DIAMONDS BROADEN THE HORIZONS.

Author: Herbert, Stan

Source: Civ Eng (London) Jul 1987 p 41, 43-44

Publication Year: 1987

CODEN: CVEGA5 ISSN: 0305-6473

Language: ENGLISH

...Abstract: by De Beers. These significantly increase the options open to the blademaker and drill bit **manufacturer**. Selection of one diamond abrasive as opposed to another implies both technical and economic considerations...

Identifiers: DIAMOND SYNTHESIS TECHNOLOGY; **DIAMOND** SAW BLADE; **LASER** WELDED **DIAMOND** BLADE; LONG-LIFE DIAMOND BLADES

17/3,K/7 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2005 Inst for Sci Info. All rts. reserv.

O3451524 Genuine Article#: PF447 No. References: 72

Title: A PRELIMINARY-STUDY OF N-15 N-14 IN OCTAHEDRAL GROWTH FORM DIAMONDS

Author(s): BOYD SR; PILLINGER CT

Corporate Source: UNIV PARIS 07, GEOHIM ISOTOPES STABLES LAB, 4 PL

JUSSIEU/F-75251 PARIS 05//FRANCE/; OPEN UNIV, DEPT EARTH SCI/MILTON

KEYNES MK7 6AA/BUCKS/ENGLAND/

Journal: CHEMICAL GEOLOGY, 1994, V116, N1-2 (SEP 1), P43-59

ISSN: 0009-2541

Language: ENGLISH Document Type: ARTICLE (Abstract Available)

...Abstract: Australia and North America. The sample set included locations such as Finsch (South Africa), a mine which produces diamonds having deltaC-13-values close to -5%0, and Argyle (Australia), a mine which produces C-13-depleted diamonds.

The nitrogen within ''high-deltaC-13'' diamonds (deltaC-13...
...Identifiers--CARBON ISOTOPIC COMPOSITION; VACUUM MASS-SPECTROMETRY;
AR-40-AR-39 LASER PROBE; ECLOGITIC DIAMONDS; SOUTH-AFRICA;
CLINOPYROXENE INCLUSIONS; CRETACEOUS KIMBERLITES; NITROGEN ISOTOPES;
BASALTIC GLASSES; IRON-METEORITES

17/3,K/8 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus
(c)2005 Japan Science and Tech Corp(JST). All rts. reserv.

04662284 JICST ACCESSION NUMBER: 00A0695747 FILE SEGMENT: JICST-E
Microleakage of Class V Composite Restorations Prepared by Er:YAG Laser.
KUSAKA TERUO (1); TAKAMIZU MASAAKI (1); KONO ATSUSHI (1)
(1) Turumi Univ., Sch. of Dent. Med.
Nippon Shika Hozongaku Zasshi (Japanese Journal of Conservative Dentistry),
2000, VOL.43,NO.3, PAGE.747-756, FIG.7, TBL.4, REF.32
JOURNAL NUMBER: Y0096AAL ISSN NO: 0387-2343
UNIVERSAL DECIMAL CLASSIFICATION: 616.314-083

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper MEDIA TYPE: Printed Publication

...ABSTRACT: laser etching effect" than cavities prepared with a diamond bur. Both dentin cavities prepared using laser and diamond bur on the root surface showed similar marginal leakage. On the other hand, gingival dentin...

- ...methods before restoring with a resin composite, Clearfil AP-X (Kuraray). 1. Mega Bond by manufacturer 's directions. 2. 40% phosphoric acid etching before Mega Bond application. 3. Scraping with spoon...
- ...4. Active priming (40sec) of Mega Bond. 5. Clearfil Liner Bond II (Kuraray) system by manufacturer 's directions. After storing in 37.DEG.C. water for 24 hours, the specimens were...

17/3,K/9 (Item 2 from file: 94)

DIALOG(R) File 94: JICST-EPlus

(c) 2005 Japan Science and Tech Corp(JST). All rts. reserv.

03421133 JICST ACCESSION NUMBER: 97A0939372 FILE SEGMENT: JICST-E Laser cutting. Start of direct sale in Coherent Japan.

PUMA HABATO (1)

(1) Kohirentovjapan

Sheet Met & Fabr, 1997, VOL.41, NO.10, PAGE.60-61, FIG.3

JOURNAL NUMBER: F0409ACK ISSN NO: 0918-0699

UNIVERSAL DECIMAL CLASSIFICATION: 621.9.047/.048 621:658.5

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

ABSTRACT: In unifying Coherent Co. which was the industrial laser equipment manufacturer in Coherent Japan which is Japanese juridical person of this company from the conventional agency...

...field is the development of CO2 laser and solid-state laser of LD excitation, and "diamond CO2 laser" are the representative goods.

17/3,K/10 (Item 1 from file: 95)

DIALOG(R) File 95:TEME-Technology & Management

(c) 2005 FIZ TECHNIK. All rts. reserv.

00849015 M95016344567

Automatic guidance of a mining vehicle using laser range data: simulation and preliminary experimental results

(Automatische Lenkung eines Minenfahrzeugs mit Laser Entfernungsdaten: Simulation und erste experimentelle Ergebnisse)

Juneau, L; Hurteau, R

Ecole Polytech., Montreal, CDN

ISRAM 94, Robotics and Manuf., Recent Trends in Res.; Education, and Applications, Proc. of the 5th Int. Symp. on Robotics and Manuf.: Res., Education, and Applications, Maui, USA, Aug 14-18, 19941994

Document type: Conference paper Language: English

Record type: Abstract

ISBN: 0-7918-0044-X

ABSTRACT:

An automatic guidance system for semi-structured environments such as mine drift is presented in this paper. This system uses a laser range finder to obtain information about the environment. A Kalman filter provides estimates of the tunnel curvature and the lateral...

17/3,K/11 (Item 1 from file: 99)
DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs
(c) 2005 The HW Wilson Co. All rts. reserv.

1739263 H.W. WILSON RECORD NUMBER: BAST98058434

Proposed SMPTE standard for motion-picture film (35-mm) -- manufacturer
-printed latent image identification information

SMPTE Journal v. 107 no8 (Aug. '98) p. 578-81

DOCUMENT TYPE: Feature Article ISSN: 0036-1682

Proposed SMPTE standard for motion-picture film (35-mm) -- manufacturer -printed latent image identification information

ABSTRACT: The proposed SMPTE standard for Motion-Picture Film (35-mm)--Manufacturer -Printed Latent Image Identification Information is presented. The proposal includes details of scope, normative references...

...general format, human-readable key numbers, machine-readable key numbers, optional-frame index mark, optional manufacturer - identification information, and bar code scanner and density specifications.

.17/3,K/12 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2005 INIST/CNRS. All rts. reserv.

13410365 PASCAL No.: 98-0103398

Aluminum-based MMC machining with diamond-coated cutting tools DURANTE S; RUTELLI G; RABEZZANA F

GIVENS John H, ed; MATTHEWS Allan, ed; MITTERER Christian, ed; ROHDE Suzanne L, ed

Centro Ricerche Fiat, 50 St. Torino, 10043 Orbassano (TO), Italy; Centro Istituto Lavorazione Metalli, Orbassano (TO), Italy; Metec, Torino, Italy Micron Technology, Inc., Boise, ID 83707-0006, United States; Research Centre in Surface Engineering, University of Hull, North Humberside, HU6 7RX, United Kingdom; Institute fuer Metallkunde und Werkstoffkunde, Montanuniversitaet Leoben, Leoben, Austria; University of Nebraska, 255 Walter Scott Engineering Center, Lincoln, NE 68588-065, United States American Vacuum Society. Vacuum Metallurgy and Thin Films Division, United States.

ICMCTF'97 International Conference on Metallurgical Coatings and Thin Films, 24 (San Diego, California USA) 1997-04-21
Journal: Surface & coatings technology, 1997, 94-95 (1-3) 632-640
Language: English

Copyright (c) 1998 INIST-CNRS. All rights reserved.

... weight savings will lead to a reduction in the fuel consumption and environment impact. Automotive **producers** are testing prototypes in Al-MMCs such as brake disk and drum, callipers, piston and...

English Descriptors: Coatings; Surface treatment; Composite material;

Aluminium base alloys; Dispersion strengthened metal; Synthetic diamond; Cutting tool; Machining; Scanning electron microscopy; Experimental study

17/3,K/13 (Item 1 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
(c) 2002 The Gale Group. All rts. reserv.

09126617

Lasers and x-rays force the pace of diamond mining BOTSWANA: DIAMOND MINING TO USE LASERS /X-RAYS

Financial Times (FT) 01 July 1999 p. 36

Language: ENGLISH

BOTSWANA: DIAMOND MINING TO USE LASERS /X-RAYS

... Botswana government and De Beers is to improve the recovery of diamonds from the Jwaneng mine at the edge of the Kalahari desert. New technology housed in a building called the...

... staff numbers and mean that staff will not need to touch the ore. The Jwaneng \min is expecting to produce 13mm carats a year with the new technology. The Aquarium cost BP 360mm, and De Beers anticipate that the technology will be taken up by other producers.

17/3,K/14 (Item 2 from file: 583)

DIALOG(R) File 583: Gale Group Globalbase (TM) (c) 2002 The Gale Group. All rts. reserv.

04036230

Un petit million de carats...

WORLD - SYNTHETIC DIAMOND HAS MANY POSSIBLE APPLICATIONS

Echos (LE) 16 January 1991 p24

ISSN: 0153-4831 Language: French

... been selling synthetic diamonds since 1960, has produced diamond films which are purer than natural ${\tt diamonds}$, ten times more ${\tt laser}$ -resistant and 50% better at conducting heat. The Californian company Crystallume is selling glass with...

... to use them for cutting tools, and a De Beers subsidiary is among the European producers of synthetic diamonds.

17/3,K/15 (Item 1 from file: 483)

DIALOG(R) File 483: Newspaper Abs Daily

(c) 2005 ProQuest Info&Learning. All rts. reserv.

05809961 SUPPLIER NUMBER: 47370871

MILLENNIUM GEAR ISN'T FOR THE AGES

Ryan, Suzanne C Boston Globe, p D1 Dec 21, 1999

ISSN: 0743-1791 NEWSPAPER CODE: BOST

DOCUMENT TYPE: LIV; Newspaper article

LANGUAGE: English RECORD TYPE: ABSTRACT

...ABSTRACT: number 2000. Bailey Banks & Biddle has a "millennium ring" - a solitaire with "2000" inscribed by laser within the diamond. Inside the band is a "2" inscribed alongside three inlaid diamonds. But that doesn't...

...has proven to be correct." The multicolored sweaters and beaded evening tops have been "good sellers," she says. A spokeswoman for Bailey Banks & Biddle says it expects to sell out its...

```
(Item 1 from file: 2)
DIALOG(R) File 2: INSPEC
(c) 2005 Institution of Electrical Engineers. All rts. reserv.
         INSPEC Abstract Number: A2000-18-4240E-011, B2000-09-4350-035
  Title: CVD diamond transmissive diffractive
                                                  optics for CO/sub 2/
lasers
  Author(s): Kononenko, V.V.; Konov, V.I.; Pimenov, S.M.; Prokhorov, A.M.;
Pavelyev, V.S.; Soifer, V.A.
 Author Affiliation: Gen. Phys. Inst., Moscow, Russia
  Journal: New Diamond and Frontier Carbon Technology
                                                       vol.10, no.2
97-107
  Publisher: MYU,
  Publication Date: 2000 Country of Publication: Japan
  CODEN: NDFTFF ISSN: 1344-9931
  SICI: 1344-9931(2000)10:2L.97:DTDO;1-H
  Material Identity Number: H380-2000-005
  Language: English
  Subfile: A B
  Copyright 2000, IEE
                         transmissive diffractive optics for CO/sub 2/
 Title: CVD diamond
lasers
  Abstract: Results of the development of CVD
                                                   diamond transmissive
diffractive optical elements (DOEs) for CO/sub 2/ lasers are reported.
The technique of laser ablation patterning of a diamond surface was
applied to create a given phase microrelief on mechanically polished
diamond plates. Micropatterning was performed using a KrF excimer laser (
lambda =248 nm). Multilevel spherical (focal...
... in good agreement with the results of calculations. The diffraction
efficiency of the developed CVD diamond diffractive optical elements
was found to be only 1-2% lower than the theoretical value.
  ...Descriptors: diamond; ...
...diffractive optical elements...
...laser beam etching; ...
... micromachining; ...
... optical fabrication...
... optical focusing
 Identifiers: CVD diamond; ...
...transmissive diffractive optical elements...
... diamond surface...
...mechanically polished diamond plates...
...laser micromachining; ...
... etching depth...
...computer design ;
25/3,K/2 (Item 2 from file: 2)
```

DIALOG(R) File 2:INSPEC (c) 2005 Institution of Electrical Engineers. All rts. reserv. INSPEC Abstract Number: B2000-05-4145-017 Title: Production possibilities of microoptics with excimer laser Author(s): Tonshoff, H.K.; Graumann, C.; Rinke, M.; Hesener, H.; Wais, J. Author Affiliation: Laser Zentrum Hannover eV, Germany Title: MICRO SYSTEM Technologies 98. 6th International Conference on Micro Electro, Opto, Mechanical Systems and Components Editor(s): Reichl, H.; Obermeier, E. Publisher: VDE Verlag, Berlin, Germany Publication Date: 1998 Country of Publication: Germany ISBN: 3 8007 2421 9 Material Identity Number: XX-1998-03499 Conference Title: Proceedings of MICRO SYSTEM Technologies 98 Conference Date: 1-3 Dec. 1998 Conference Location: Potsdam, Germany Language: English Subfile: B Copyright 2000, IEE Abstract: Currently there is a strong demand for diffractive and optical elements (DROE) made from glass. Due to the brittle nature of this material, only a limited number of manufacturing methods can be used to machine glass with a sub-micron accuracy. Thus, current glass DROEs are machined mainly by photolithography and etching . These methods can be used for series production but is not suitable for the manufacture... .:.new laser machining system for material treatment at a wavelength of 193 nm has been designed and built. The better absorption of 193 nm compared to 248 nm or larger wavelengths... ... is significantly increased. This ablation technique is well suited for structuring brittle materials such as diamonds or glass to receive DROE like gratings, refractive microlenses or lens arrays. Descriptors: diffractive optical elements... ...micro- optics ; micromachining; optical fabrication... ... optical glass ...Identifiers: diffractive and refractive optical element... ... optical manufacturing... ... diamond; (Item 3 from file: 2) DIALOG(R) File 2:INSPEC (c) 2005 Institution of Electrical Engineers. All rts. reserv. INSPEC Abstract Number: A1999-07-4285D-002 6170096 Title: Minimizing tool marks in deterministic microgrinding Author(s): Yi Li; Gracewski, S.; Funkenbusch, P.; Ruckman, J. Author Affiliation: Dept. of Mech. Eng., Rochester Univ., NY, USA Journal: Proceedings of the SPIE - The International Society for Optical

```
Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA)
vol.3429
           p.80-8
  Publisher: SPIE-Int. Soc. Opt. Eng,
  Publication Date: 1998 Country of Publication: USA
  CODEN: PSISDG ISSN: 0277-786X
  SICI: 0277-786X(1998)3429L.80:MTMD;1-0
  Material Identity Number: C574-1999-005
  U.S. Copyright Clearance Center Code: 0277-786X/98/$10.00
  Conference Title: Current Developments in Optical Design and Engineering
VII
  Conference Sponsor: SPIE
  Conference Date: 22-23 July 1998 Conference Location: San Diego, CA,
  Language: English
  Subfile: A
  Copyright 1999, IEE
 Title: Minimizing tool marks in deterministic microgrinding
  Abstract: In deterministic microgrinding of glass optics with metal
bond diamond ring tools, optical surfaces exhibit residual cutting tool
marks that can significantly affect the efficiency of the finish
polishing process. The tool marks for spherical surface generation appear
as curves that follow contact lines between the tool and workpiece from the
center to the edge of the workpiece. The tool marks are circumferentially
periodic and the number is typically equal to the k-ratio, i.e. the ratio
of grinding tool speed...
... for tool mark generation. For ratios greater than a critical value, the
amplitude of tool marks is reduced to a level not detectable by interferometry. The influences of vibration and tool roughness are also
discussed. The model presented provides new insight into the generation of
tool marks and optimization of deterministic microgrinding processes.
  ... Descriptors: micromachining; ...
... optical elements...
... optical fabrication...
... optical glass
  ... Identifiers: tool marks; ...
...glass optics; ...
...metal bond diamond ring tools...
... optical surfaces...
... residual cutting tool marks ; ...
...circumferentially periodic marks ;
 25/3, K/4
              (Item 4 from file: 2)
DIALOG(R)File
                2:INSPEC
(c) 2005 Institution of Electrical Engineers. All rts. reserv.
          INSPEC Abstract Number: A9717-8160-002, B9709-4360-001
  Title: Excimer lasers-a novel tool for material fine and microprocessing
of glasses
  Author(s): Pfeufer, V.
  Author Affiliation: Lambda Phys. GmbH, Gottingen, Germany
```

Journal: Glass Science and Technology vol.70, no.4 p.113-18-Publisher: Verlag der Deutschen Glastechnischen Gesellschaft, Publication Date: April 1997 Country of Publication: Germany

CODEN: GSTEEX ISSN: 0946-7475

SICI: 0946-7475(199704)70:4L.113:ELNT;1-R

Material Identity Number: D444-97007

Language: English

Subfile: A B

Copyright 1997, FIZ Karlsruhe

...Abstract: more suited for material fine and microprocessing. Industrial laser applications include cutting, drilling, welding, soldering, marking, trimming, coating, alloying, annealing, hardening, lithography, etc. Each year thousands of laser systems for material...

... subsequent thermal blast-off of the upper part; sealing glass casings containing electronic circuits (transponders); marking quartz glasses, bulbs and flasks, dyed or coated drinking glasses, cups, etc.; marking, cutting and drilling diamonds. Despite these examples the number of actual laser applications in the glass industry is limited, and behind each of these...

```
...Descriptors: micromachining; ...
```

```
... optical fibres
...Identifiers: marking; ...
...quartz glasses marking; ...
... diamond cutting...
... diamond drilling...
```

... optical fibre grating writing...

... micromachining;

26/3,K/1 (Item 1 from file: 144) DIALOG(R)File 144:Pascal (c) 2005 INIST/CNRS. All rts. reserv.

16503410 PASCAL No.: 04-0148473

Comparison of the new W-interchange with conventional interchanges Operational Effects of Geometrics 2003

THOMPSON Cipriana D; HUMMER Joseph E; KLUCKMAN Roger C

Sabra, Wang and Associates, Inc., 1504 Joh Avenue, Suite 160, Baltimore, MD 21227, United States; Department of Civil Engineering, North Carolina State University, Raleigh, NC 27695-7908, United States; North Carolina Department of Transportation, 1020 Birch Ridge Drive, Raleigh, NC 27610, United States

Journal: Transportation research record, 2003 (1847) 42-51 Language: English

Copyright (c) 2004 INIST-CNRS. All rights reserved.

English Descriptors: Road traffic; Interchange; Traffic congestion; Traffic
flow; Numerical simulation; Microscopic model; Design criterion;
Freeway; Travel time; Capacity; Traffic lights; Timing; Economic aspect;
Cost estimation

26/3,K/2 (Item 1 from file: 483)
DIALOG(R)File 483:Newspaper Abs Daily
(c) 2005 ProQuest Info&Learning. All rts. reserv.

06040581 SUPPLIER NUMBER: 55302898

Off The Cuff Leaders in the world of business share their thoughts on the way we work, spend, and prepare for the future.

Anonymous Christian Science Monitor, p 14 Jun 19, 2000 NEWSPAPER CODE: CSM ; Newspaper article

LANGUAGE: English RECORD TYPE: ABSTRACT

...ABSTRACT: packaging, a suede portfolio, and a certificate from an independent laboratory. And the diamond gets <code>inscribed</code> with a [<code>microscopic</code>] serial <code>number</code>.

```
(Item 1 from file: 2)
DIALOG(R)File
              2:INSPEC
(c) 2005 Institution of Electrical Engineers. All rts. reserv.
          INSPEC Abstract Number: A2001-10-6250-002
  Title: Structural phase transitions in Sr/sub 2/Fe/sub 2/O/sub 5/ under
high pressure
  Author(s): Adler, P.; Schwarz, U.; Syassen, K.; Milner, A.P.; Pasternak,
M.P.; Hanfland, M.
  Author Affiliation: Max-Planck-Inst. fur Festkorperforschung, Stuttgart,
Germany
                                              vol.155, no.2
  Journal: Journal of Solid State Chemistry
                                                               p.381-8
  Publisher: Academic Press,
  Publication Date: Dec. 2000 Country of Publication: USA
  CODEN: JSSCBI ISSN: 0022-4596
  SICI: 0022-4596(200012)155:2L.381:SPTS;1-T
  Material Identity Number: J178-2001-001
  U.S. Copyright Clearance Center Code: 0022-4596/2000/$35.00
  Language: English
  Subfile: A
  Copyright 2001, IEE
  ... Abstract: by angle-dispersive synchrotron X-ray powder diffraction and
/sup 57/Fe Mossbauer spectroscopy using diamond anvil cell techniques.
Between 11 and 14 GPa the low-pressure brownmillerite- type structure with
an equal number of octahedrally and tetrahedrally coordinated Fe/sup 3+/
sites is transformed into a tetragonal perovskite-like structure. The
Mossbauer spectra...
...an intensity ratio of about 3:1. The Mossbauer parameters are consistent
with two five- coordinated Fe/sup 3+/ sites differing in the degree of
structural distortion of the FeO/sub 5/ polyhedra. Laser annealing of the
high-pressure phase at 15 GPa induces a transformation from the tetragonal
...brownmillerite structure to 10 in the Sr/sub 2/Mn/sub 2/0/sub 5/- type
phase.
  ...Descriptors: laser beam annealing
  ... Identifiers: diamond anvil cell techniques...
...brownmillerite- type structure...
...five- coordinated Fe/sup 3+/ sites...
... laser annealing
              (Item 2 from file: 2)
DIALOG(R) File
               2:INSPEC
(c) 2005 Institution of Electrical Engineers. All rts. reserv.
         INSPEC Abstract Number: A91013214
  Title: Effect of iron on the crystal structure of (Mg,Fe)SiO/sub 3/
perovskite
 Author(s): Kudoh, Y.; Prewitt, C.T.; Finger, L.W.; Darovskikh, A.; Ito,
 Author Affiliation: Geophys. Lab., Carnegie Inst. of Washington, DC, USA
  Journal: Geophysical Research Letters
                                          vol.17, no.10
  Publication Date: Sept. 1990 Country of Publication: USA
```

CODEN: GPRLAJ ISSN: 0094-8276

U.S. Copyright Clearance Center Code: 0094-8276/90/90GL-01488\$03.00

Language: English

Subfile: A

ijŤ

...Abstract: O/sub 3/, quenched from 26 GPa and 2173 K in a uniaxial split-sphere- type high-pressure apparatus, was studied at the SUNY X3A beamline at the National Synchrotron Light...

... the octahedral site of a perovskite synthesized at 50 GPa and 2000 K in a diamond -anvil cell with laser heating.

...Identifiers: uniaxial split-sphere- type high-pressure apparatus...

...six coordinated Si site...

33/3,K/3 (Item 1 from file: 6)

DIALOG(R) File 6:NTIS

(c) 2005 NTIS, Intl Cpyrght All Rights Res. All rts. reserv.

1365052 NTIS Accession Number: DE88004000

Inspection of the Large Optics Diamond Turning Machine

Patterson, S. R.

Lawrence Livermore National Lab., CA.

Corp. Source Codes: 068147000; 9513035

Sponsor: Department of Energy, Washington, DC.

Report No.: UCRL-97696; CONF-8711122-1

1987 18p

Languages: English Document Type: Conference proceeding

Journal Announcement: GRAI8813; NSA1300

66. meeting of the IMOG Gaging Subgroup, Livermore, CA, USA, 3 Nov 1987. Portions of this document are illegible in microfiche products. Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A03/MF A01

Inspection of the Large Optics Diamond Turning Machine

The Large Optics **Diamond** Turning Machine (LODTM) is of stacked slide design, somewhat resembling a bridge **type coordinate** measuring machine. In fact, the machine must serve as a measuring machine for the **quality** control steps of workpiece manufacture since there is not currently another method of measuring the...

Descriptors: *Lathes; Accuracy; Design; Electric Measuring Instruments; Fabrication; Laser Mirrors; Optics; Positioning; Stability

33/3,K/4 (Item 2 from file: 6)

DIALOG(R) File 6:NTIS

(c) 2005 NTIS, Intl Cpyrght All Rights Res. All rts. reserv.

1198787 NTIS Accession Number: AD-A157 963/0

Improvement of Manufacturing Techniques and Quality of Optical Scratch Standards for Fire Control Systems

(Contractor rept)

Goldgraben, J. R.; Salerno, J.

Decilog, Inc., Melville, NY.

Corp. Source Codes: 062171000; 392772

Sponsor: Army Armament Research and Development Command, Dover, NJ. Product Assurance Directorate.; Shared Bibliographic Input.

Report No.: ARPAD-CR-85001; SBI-AD-E401 373

Aug 85 53p

Languages: English

Journal Announcement: GRAI8524

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A04/MF A01

Improvement of Manufacturing Techniques and Quality of Optical Scratch Standards for Fire Control Systems

Manufacture of the Optical Surface Quality Standards (Scratch and Dig) has been a problem since their introduction. The present technique of diamond scribing the scratch standard is haphazard mainly because there are no controlling dimensions for the...

...evaluation was conducted of manufacturing techniques that would reliably reproduce the stardards. Additionally, work was **coordinated** with the National Bureau of Standards who developed a measuring technique and generated a configuration...

...Descriptors: properties; *Photomasking; *Fire control systems; Photolithography; Ion beams; Profilometers; Ion implantation; Diffraction; Electron beams; Lithography; Quality; Radiometry; Scanning; Manufacturing; Visual inspection; Graphs; Standards; Spatial distribution; Frequency; Pilot studies; Fabrication; Acceptance tests; Lasers

Identifiers: *Scratches; MIL-STD-0-13830A; Submasters; Laser scribes; MMT(Manufacturing Methods and Tehnologies Program); NTISDODXA; NTISDODA

33/3,K/5 (Item 3 from file: 6)

DIALOG(R) File 6:NTIS

(c) 2005 NTIS, Intl Cpyrght All Rights Res. All rts. reserv.

0664121 NTIS Accession Number: UCRL-78780/XAB

Microcomputer-Based Electronic Error Corrector Bar for a Numerically-Controlled Machine Tool

Lamb, J. W.; Whelan, H. A.

California Univ., Livermore. Lawrence Livermore Lab.

Corp. Source Codes: 9500007

Sponsor: Energy Research and Development Administration.

Report No.: CONF-770607-3

10 Nov 76 10p

Document Type: Conference proceeding Journal Announcement: GRAI7801; NSA0200

Joint automatic control conference and IEEE Society on Control Systems, San Francisco, California, United States of America (USA), 22 Jun 1977.

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A02/MF A01

The production of optical- quality surfaces for machined laser mirrors demands machining accuracies that are beyond the mechanical limits of even the best machine...

... make corrections every 10 mils for both displacement and straightness errors to a 1 microinch **Diamond** Turning Lathe. The correction is predicted to improve the positional accuracy from 60 microinches to...

Descriptors: *Lase r mirrors; *Machine tools; Accuracy; Coordinates; Corrections; Errors; Machining; Microprocessors; On-line control systems Identifiers: ERDA/420200; ERDA/420300; Numerical control; Diamond wheels; NTISERDA

33/3,K/6 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2005 Inst for Sci Info. All rts. reserv.

09345252 Genuine Article#: 393ZG No. References: 20

Title: Structural phase transitions in Sr2Fe2O5 under high pressure

Author(s): Adler P (REPRINT); Schwarz U; Syassen K; Milner AP; Pasternak

MP; Hanfland M

Corporate Source: Max Planck Inst Festkorperforsch, Heisenbergstr 1/D-70569 Stuttgart//Germany/ (REPRINT); Max Planck Inst Festkorperforsch, D-70569 Stuttgart//Germany/; Tel Aviv Univ, Sch Phys & Astron, IL-69978 Tel Aviv//Israel/; European Synchrotron Radiat Facil, F-38043 Grenoble//France/

Journal: JOURNAL OF SOLID STATE CHEMISTRY, 2000, V155, N2 (DEC), P381-388 ISSN: 0022-4596 Publication date: 20001200

Publisher: ACADEMIC PRESS INC, 525 B ST, STE 1900, SAN DIEGO, CA 92101-4495 USA

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: temperature by angle-dispersive synchrotron X-ray powder diffraction and Fe-57 Mossbauer spectroscopy using diamond anvil cell techniques. Between 11 and 14 GPa the low-pressure brownmillerite- type structure with an equal number of octahedrally and tetrahedrally coordinated Fe3+ sites is transformed into a tetragonal perovskite-like structure, The Mossbauer spectra of the...

perovskite-like structure, The Mossbauer spectra of the...
...an intensity ratio of about 3:1, The Mossbauer parameters are consistent with two five- coordinated Fe3+ sites differing in the degree of structural distortion of the Fe0, polyhedra, Laser annealing of the high-pressure phase at 15 GPa induces a transformation from the tetragonal...

...Sr2+ ions has increased from 8 in the brownmillerite structure to 10 in the Sr2Mn2O5- type phase, (C) 2000 Academic Press.

33/3,K/7 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
(c) 2005 ProQuest Info&Learning. All rts. reserv.

833928 ORDER NO: AAD84-02726

A MACHINING SYSTEM FOR TURNING NONAXISYMMETRIC SURFACES

Author: DOUGLASS, SPIVEY STEVENS

Degree: PH.D. Year: 1983

Corporate Source/Institution: THE UNIVERSITY OF TENNESSEE (0226) Source: VOLUME 44/10-B OF DISSERTATION ABSTRACTS INTERNATIONAL. PAGE 3156. 213 PAGES

...demanded by the optics industry. Such reflectors have also been required in high energy gas <code>laser</code> systems used to trigger thermonuclear reactions in experiments connected with advanced electric power generation.

Historically, production of optical pieces of the quality described required many repetitions of selective hand-lapping, polishing and measuring. In the past ten years production of these pieces has been

enhanced by machining with **diamond** cutting tools on precision numerically controlled (NC) turning machines. These machines are capable of generating axisymmetric surfaces competitive in **quality** to those produced by conventional means without the expensive hand-work. This experiment describes the...

A transformation was performed on the parabola to describe the auxiliary slide motion in **coordinates** centered in the off-axis sector. A Fourier expansion resulted in a scheme which permits...

...20 microinches of vibration detracted from the surface finish and denied the use of a diamond cutting tool. A structural resonance in the linear motor prevented the use of higher position...

33/3,K/8 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2005 INIST/CNRS. All rts. reserv.

...motor.

14946264 PASCAL No.: 01-0098011

Structural phase transitions in Sr SUB 2 Fe SUB 2 O SUB 5 under high pressure

ADLER P; SCHWARZ U; SYASSEN K; MILNER A P; PASTERNAK M P; HANFLAND M Max-Planck-Institut fuer Festkoerperforschung, Heisenbergstr. 1, 70569 Stuttgart, Germany; School of Physics and Astronomy, Tel Aviv University, 69978 Tel Aviv, Israel; European Synchrotron Radiation Facility, BP 220, 38043 Grenoble, France

Journal: Journal of solid state chemistry, 2000, 155 (2) 381-388 Language: English

Copyright (c) 2001 INIST-CNRS. All rights reserved.

- ... dispersive synchrotron X-ray powder diffraction and SUP 5 SUP 7 Fe Moessbauer spectroscopy using diamond anvil cell techniques. Between 11 and 14 GPa the low-pressure brownmillerite- type structure with an equal number of octahedrally and tetrahedrally coordinated Fe SUP 3 SUP + sites is transformed into a tetragonal perovskite-like structure. The Moessbauer
- ... an intensity ratio of about 3:1. The Moessbauer parameters are consistent with two five- coordinated Fe SUP 3 SUP + sites differing in the degree of structural distortion of the FeO SUB 5 polyhedra. Laser annealing of the high-pressure phase at 15 GPa induces a transformation from the tetragonal...
- ...brownmillerite structure to 10 in the Sr SUB 2 Mn SUB 2 O SUB 5 type phase.
- ...English Descriptors: study; Pressure effects; Very high pressure; Phase transformations; XRD; Crystal structure; Moessbauer effect; Thermal annealing; Laser beams; Crystallographic site; Strontium oxides; Iron oxides
- ...French Descriptors: pression; Tres haute pression; Transformation phase; Diffraction RX; Structure cristalline; Effet Moessbauer; Recuit thermique; Faisceau laser; Site cristallographique; Strontium oxyde; Fer oxyde; 6150K; 6166F; Sr2Fe2O5; Fe O Sr

Gemological Institute of America

Home: Introduction » Diamond Grading Reports

Home: Introduction
How to Buy a Diamond
Diamond Grading
Reports
- GIA Grading Services

- GIA Grading Services
GIA Mission Statement



This is not an endorsement. The information on this page is provided by GIA as a nonprofit service.

No news at this time

The Wall Street Journal says:

"...Every diamond should come with a grading certificate from an accredited gemological laboratory; the jewelers we talked to agree that the Gemological Institute of America (GIA), an independent nonprofit organization, is the most trustworthy."

Contact Information: Gemological Institute of America World Headquarters 5345 Armada Dr. Carlsbad, California 92008

www.gia.edu

Diamond Grading Reports

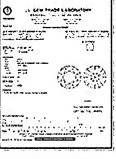
The following examples use GIA documents to show you how to read a diamond grading report. Click on the documents below to interpret each one.

Guide to the New Generation GIA Diamond Grading Report Guide to the Previous Generation GIA Diamond Grading Report Guide to the GIA Diamond Dossier® (for diamonds under 1 carat on the GIA D-Z Color Scale)



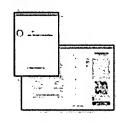
High Bandwidth

Low Bandwidth



High Bandwidth

Low Bandwidth



High Bandwidth

Low Bandwidth

GIA's "New Generation" Reports:

Beginning January 1, 2000, the GIA Gem Trade Laboratory issued a "new generation" of diamond grading, colored diamond and gemological identification report forms and covers. The entire family of GIA Gem Trade Laboratory Reports features a contemporary design and incorporates security features that exceed document industry security guidelines. GIA will continue to recognize all Reports it has issued these past 50 years. Both versions of the GIA Diamond Grading Report currently in circulation are available for viewing on this site (see above).

While the acquisition of a diamond is the ultimate symbol of love, it also represents a major investment in time, energy and money. You need and deserve to feel confident in your buying decision – and in the *integrity* of what you've acquired.

As the creator of the **International Diamond Grading System**, GIA has literally set the industry standard for diamond grading and gemological identification. The Institute's diamond grading reports are

Tel: (800) 421- 7250 (in the US and Canada)

Or outside the US: (760) 603-4000

regarded throughout the international jewelry trade as a hallmark of integrity, reliability, and consistency.

As the Wall Street Journal told its readers, every diamond should come with a grading report. The GIA Diamond Grading Report and GIA Diamond Dossier® (for diamonds under 1 carat on the GIA D-Z Color Scale) gives you a respected impartial assessment of quality and authenticity.

How to Obtain a Diamond Grading Report:

Buyers and sellers may send their diamonds, colored stones, or pearls to the GIA Gem Trade Laboratory for grading, identification, and inscription services directly or through your favorite professional jeweler. A professional jeweler can help make the submission of your stone a smooth and easy process. They can even arrange for you to have a personal message or unique GIA Diamond Grading Report number laser-inscribed onto the girdle (the diamond's outer edge) of your stone.

Laser Inscription Services:

Many security-minded consumers select the laser-inscription option when they submit stones for diamond grading. By requesting laser-inscription, consumers enjoy the added benefit of having their diamond inscribed in a way that identifies it as being unmistakably theirs.

Without causing any damage, a micro-laser beam is used to etch a microscopic inscription on the girdle of diamonds weighing 0.18 carat or more. GIA Diamond Grading Report numbers or other information relating to ownership are often inscribed. However, romantic messages like "Forever Yours," and "Always and Forever" have recently been etched onto a



diamond's girdle. Poetry, symbols, names and special dates are also popular. Since a message can be read only under magnification, you and your special someone can keep it to yourselves or choose to share it with others. The price of GIA's inscription service is based on the weight of the diamond and the length of the inscription. Typically, up to 15 letters or spaces can be inscribed.

Diamond Registry Services:

Often, you can enjoy hidden benefits when submitting your stones for grading. For example, GIA's expert graders digitally plot, store, and track all the pertinent information about your diamond – including the stone's inclusions, facet layout and shape. In fact, a diamond's intrinsic information is so unique that it can be likened to a "fingerprint." Thus, if a stone graded by GIA is lost or stolen it can be immediately identified if it is ever re-submitted to the Institute for grading. Because of the Institute's extraordinary database of diamond "fingerprints" (known as GIA's Diamond Registry), the Institute has been able to help law enforcement agencies, such as the FBI and Interpol, solve difficult cases – and retrieve stolen goods.

[back to top]

```
File 348: EUROPEAN PATENTS 1978-2005/Jun W02
         (c) 2005 European Patent Office
File 349:PCT FULLTEXT 1979-2005/UB=20050609,UT=20050602
         (c) 2005 WIPO/Univentio
Set
        Items
                 Description
                GEMSTONE? OR GEMS OR AMYTHEST OR DIAMOND??
S1
        38363
                 (LOCAT? OR IDENTIF? OR FIND? OR READING OR READS) (3N) (INFO-
S2
        85216
             RMATION OR INDICIA OR INDICIUM)
                MANUFACTURER OR OWNER OR RETAILER OR SELLER?? OR PRODUCER?
S3
             OR MINE OR COUNTRY (2N) ORIGIN OR BRAND () NAME
                NUMBER OR ID OR (IDENTIFICATION OR CERTIFICATION) () NUMBER??
      1052709
S4
                LOGO OR SYMBOLS OR DESIGN? OR ALPHANUMERIC OR DATES OR MES-
S5
      1319891
             SAGES
                COORDINATE? OR XY
S6
       126258
                 (AUTHENTICAT? OR CERTIF?) (3N) S1
S7
           31
                 (PURITY OR QUALITY OR TYPE) (3N) S1
S8
         1325
         1820
                 (S1 OR S2) (3N) (SCANNING OR SCANNER OR LASER?)
S9
       358498
                NEAR() FIELD() OPTIC?? OR OPTIC?
S10
                 (ETCH? OR MARKING OR MARKS OR MARKED OR INSCRIB?) (3N) S1(3N-
S11
           41
             ) (S3 OR S4 OR S5)
                MICROSCOPIC (3N) S11
S12
                AU=(PATTON D? OR SPOONHOWER J? OR PATTON, D? OR SPOONHOWER,
          175
S13
              J?)
S14
         5481
                MICROMACHIN?
                S10(5N) (S7 OR S8 OR S9)
S15
          261
S16
            9
                S15(5N)S3:S5
            7
S17
                S16 NOT PY=>2001
                S17 NOT (CHECK OR FEE OR RECEIPT)
            4
S18
            4
                 S13 AND S1
S19
                S19 NOT S18
S20
            4
                 S7 NOT (S19 OR S18)
           30
S21
                S21 NOT PY=>2002
           17
S22
           17
                 IDPAT (sorted in duplicate/non-duplicate order)
S23
                 IDPAT (primary/non-duplicate records only)
           16
S24
                 S11(S)(S10 OR S14)
S25
            4
            3
                 S25 NOT (S7 OR S19 OR S18)
S26
```

```
(Item 1 from file: 348)
18/3,K/1
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
00568940
Optical disc and disc drive apparatus for writing/reading data into/from
    the disc
Optische Platte und Plattengerat zum Aufzeichnen oder Wiedergeben von Daten
    in oder von der Platte
Disque optique et appareil a disques pour enregistrer ou reproduire des
    donnees sur le ou a partir du disque
PATENT ASSIGNEE:
  MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216883), 1006, Oaza Kadoma,
    Kadoma-shi, Osaka-fu, 571, (JP), (applicant designated states:
    DE; FR; GB)
INVENTOR:
  Satoh, Isao, 36-12, Naritahigashigaoka, Neyagawa-shi, (JP)
  Fukushima, Yoshihisa, 14-C-508 Sekime-6-chome, Joto-ku, (JP)
  Ichinose, Makoto, 4-3-303, Harayamadai-1-cho, Sakai-shi, (JP)
  Kuroki, Yuzuru, 14-6-410, Minowa-2-chome, Toyonaka-shi, (JP)
  Takagi, Yuji, 3-14 Miyukihigashimachi, Neyagawa-shi, (JP)
LEGAL REPRESENTATIVE:
  Votier, Sidney David et al (37081), CARPMAELS & RANSFORD 43, Bloomsbury
    Square, London WC1A 2RA, (GB)
PATENT (CC, No, Kind, Date):
                              EP 542730 A2
                                             930519 (Basic)
                                             930825
                              EP 542730
                                         ΑЗ
                              EP 542730 B1
                                              970730
APPLICATION (CC, No, Date):
                              EP 93200206 870129;
PRIORITY (CC, No, Date): JP 8626374 860207; JP 8626376 860207; JP 8629256
    860213; JP 8638839 860224; JP 8646533 860304; JP 86113934 860519; JP
    86128669 860603
DESIGNATED STATES: DE; FR; GB
RELATED PARENT NUMBER(S) - PN (AN):
            (EP 873007892)
  EP 232134
INTERNATIONAL PATENT CLASS: G11B-007/013; G11B-007/085; G11B-019/04;
  G11B-020/12; G11B-027/10; G11B-007/007; G11B-007/09;
ABSTRACT WORD COUNT: 233
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
                                     Word Count '
Available Text Language
                           Update
                           EPABF1
                                        637
      CLAIMS A
                (English)
      CLAIMS B
                           9707W5
                                        688
                (English)
      CLAIMS B
                           9707W5
                                        602
                 (German)
      CLAIMS B
                 (French)
                           9707W5
                                       837
      SPEC A
                                       6693
                (English)
                           EPABF1
      SPEC B
                           9707W5
                                       6600
                (English)
Total word count - document A
                                       7330
Total word count - document B
                                       8727
Total word count - documents A + B
                                     16057
... SPECIFICATION the optical disc drive apparatus, the address reading
```

- section 26 reproduces the sector identifier portion ID of the optical disc by a laser beam and reads out the address information and data field identification flag of the sector identifier portion ID and outputs the address signal 107 and data...
- ...SPECIFICATION the optical disc drive apparatus, the address reading section 26 reproduces the sector identifier portion ID of the optical disc by a laser beam and reads out the address information and data

field identification flag of the sector identifier portion ID and outputs the address signal 107 and data...

```
18/3,K/2
              (Item 2 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
00421888
Bar code symbol readers with edge enhancement.
Streifenkodeleser mit Randdetektionsverbesserung.
Lecteurs de codes a barres avec meilleure mise en contraste de contours.
PATENT ASSIGNEE:
  SYMBOL TECHNOLOGIES, INC., (417663), 116 Wilbur Place, Bohemia New York
    11716-3300, (US), (applicant designated states: DE; FR; GB; IT)
INVENTOR:
  Metlitsky, Boris, 18 Millstream Lane, Stony Brook, New York 11790, (US)
  Barkan, Edward, 8 Lynn Street, South Setauket, New York 11720, (US)
  Swartz, Jerome, 19 Crane Neck Road, Setauket, New York 11733, (US)
LEGAL REPRESENTATIVE:
  Wagner, Karl H. et al (12561), WAGNER & GEYER Patentanwalte
    Gewurzmuhlstrasse 5, D-80538 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 433593 A2
                                             910626 (Basic)
                              EP 433593 A3
                                             911121
                              EP 433593 B1
                                             931215
APPLICATION (CC, No, Date):
                              EP 90119615 901012;
PRIORITY (CC, No, Date): US 438022 891120
DESIGNATED STATES: DE; FR; GB; IT
INTERNATIONAL PATENT CLASS: G06K-007/10;
ABSTRACT WORD COUNT: 163
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
                                      2836
      CLAIMS B
                (English)
                           EPBBF1
      CLAIMS B
                                      1525
                           EPBBF1
                 (German)
      CLAIMS B
                                      1841
                           EPBBF1
                 (French)
      SPEC B
                                       7652
                (English)
                           EPBBF1
Total word count - document A
Total word count - document B
                                      13854
Total word count - documents A + B
                                     13854
```

...SPECIFICATION general object of this invention to overcome the aforementioned drawbacks in the field of electro- optic readers, particularly laser scanners for reading bar code symbols.

It is another object of this invention to enhance the modulation of an analog electrical...

18/3,K/3 (Item 3 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2005 European Patent Office. All rts. reserv.

00245007

Optical disc and disc drive apparatus for writing/reading data into/from the disc.

Optische Platte und Plattengerat zum Aufzeichnen oder Wiedergeben von Daten in oder von der Platte.

Disque optique et appareil a disques pour enregistrer ou reproduire des donnees sur le ou a partir du disque.

PATENT ASSIGNEE:

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216883), 1006, Oaza Kadoma, Kadoma-shi, Osaka-fu, 571, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Satoh, Isao, 36-12, Naritahigashigaoka, Neyagawa-shi, (JP) Ichinose, Makoto, 4-3-303, Harayamadai-1-chome, Sakai-shi, (JP) Fukushima, Yoshihisa, 14-C-508, Sekime-6-chome, Joto-ku, (JP) Kuroki, Yuzuru, 14-6-410, Minowa-2-chome, Toyonaka-shi, (JP) Takagi, Yuji, 3-14, Miyukihigashimachi, Neyagawa-shi, (JP) LEGAL REPRESENTATIVE:

De Minvielle-Devaux, Ian Benedict Peter et al (30051), CARPMAELS & RANSFORD 43, Bloomsbury Square, London WC1A 2RA, (GB)

PATENT (CC, No, Kind, Date): EP 232134 A2 870812 (Basic)

EP 232134 A3 881228 EP 232134 B1 940824

APPLICATION (CC, No, Date): EP 87300789 870129;

PRIORITY (CC, No, Date): JP 8626374 860207; JP 8626376 860207; JP 8629256 860213; JP 8638839 860224; JP 8646533 860304; JP 86113934 860519; JP 86128669 860603

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G11B-007/013; G11B-020/12; G11B-027/10;

G11B-007/08; G11B-019/04;

ABSTRACT WORD COUNT: 230

LANGUAGE (Publication, Procedural, Application): English; English; FULLTEXT AVAILABILITY:

Available T	ext	Language	Update	Word Count
CLAIM	S A	(English)	EPBBF1	1504
CLAIM	SB	(English)	EPBBF1	741
CLAIM	SB	(German)	EPBBF1	700
CLAIM	S B	(French)	EPBBF1	935
SPEC	A	(English)	EPBBF1	6706
SPEC	В	(English)	EPBBF1	6575
Total word	count	- document	: A	8210
Total word	count	- document	: B	8951
Total word	count	- document	s A + B	17161

- ...SPECIFICATION the optical disc drive apparatus, the address reading section 26 reproduces the sector identifier portion ID of the optical disc by a laser beam and reads out the address information and data field identification flag of the sector identifier portion ID and outputs the address signal 107 and data...
- ...SPECIFICATION the optical disc drive apparatus, the address reading section 26 reproduces the sector identifier portion ID of the optical disc by a laser beam and reads out the address information and data field identification flag of the sector identifier portion ID and outputs the address signal 107 and data...

18/3,K/4 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

(c) 2005 WIPO/Univentio. All rts. reserv.

00347253

DOPED DIAMOND LASER
LASER A DIAMANT, DOPE
Patent Applicant/Assignee:
SI DIAMOND TECHNOLOGY INC,

Inventor(s):

JAMISON Keith D,

SCHMIDT Howard K,

Patent and Priority Information (Country, Number, Date):

WO 9629766 A1 19960926

Application:

WO 96US2540 19960226 (PCT/WO US9602540)

Priority Application: US 95406306 19950317

Designated States:

(Protection type is "patent" unless otherwise stated - for applications

prior to 2004)

CA JP KR RU AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 4219

Fulltext Availability:

Detailed Description

Detailed Description

... film during growth, one can produce a uniformly doped diamond film of arbitrary thickness.

A number of researchers have investigated diamond as a laser or optical amplifier medium using contaminants found in natural and high pressure synthetic diamonds, but uniformly metal...

```
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
01694706
Thermal transfer printing method
Thermisches Ubertragungsdruckverfahren
Methode pour l'impression par transfert thermique
PATENT ASSIGNEE:
  EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York
    14650, (US), (Applicant designated States: all)
INVENTOR:
  Allen, Loretta E., Eastman Kodak Company, 343 State Street, Rochester,
    New York 14650-2201, (US)
  Bryant, Robert C., Eastman Kodak Company, 343 State Street, Rochester,
    New York 14650-2201, (US)
  Simpson, William H., Eastman Kodak Company, 343 State Street, Rochester,
    New York 14650-2201, (US)
   Patton, David L., Eastman Kodak Company, 343 State Street, Rochester,
    New York 14650-2201, (US)
  Frosig, Peter A., Eastman Kodak Company, 343 State Street, Rochester, New
    York 14650-2201, (US)
  Johnson, David A., Eastman Kodak Company, 343 State Street, Rochester,
    New York 14650-2201, (US)
  Goff, Cobb S., Eastman Kodak Company, 343 State Street, Rochester, New
    York 14650-2201, (US)
  Coons, David E., Eastman Kodak Company, 343 State Street, Rochester, New
    York 14650-2201, (US
LEGAL REPRESENTATIVE:
  Weber, Etienne Nicolas et al (91684), Kodak Industrie, Departement
    Brevets, CRT, Zone Industrielle, 71102 Chalon sur Saone Cedex, (FR)
PATENT (CC, No, Kind, Date): EP 1388428 Al 040211 (Basic)
APPLICATION (CC, No, Date):
                              EP 2003077635 030729;
PRIORITY (CC, No, Date): US 213991 020807; US 310519 021205
DESIGNATED STATES: DE; FR; GB
EXTENDED DESIGNATED STATES: AL; LT; LV; MK
INTERNATIONAL PATENT CLASS: B41M-005/38; B41M-007/00; G06K-007/14;
  G09F-003/02; G09F-003/10; B41J-002/325
ABSTRACT WORD COUNT: 53
NOTE:
  Figure number on first page: 1
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                                     Word Count
                           Update
                           200407
                                       352
      CLAIMS A (English)
                (English)
                           200407
                                       5967
      SPEC A
Total word count - document A
                                       6319
Total word count - document B
                                         0
Total word count - documents A + B
                                      6319
INVENTOR:
... US)
   Patton, David L ...
```

(Item 1 from file: 348)

...SPECIFICATION for measuring/mapping the physical surface contour is done with a contact instrument using a **diamond** stylus with a light load (50mg). The **diamond** stylus tip has a 2.5-micron radius with a 90 degree included angle. Multiple...

```
(Item 2 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
01594568
Method for making gemstones with a unique micro discrete indicia
                Herstellung
                                von Edelsteinen mit einem einzigartigen
Verfahren zur
    mikro-diskreten Zeichen
         pour
                 fabriquer
                             des
                                   pierres
                                             precieuses
                                                          avec une marque
    micro-discrete unique
PATENT ASSIGNEE:
  EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York
    14650, (US), (Applicant designated States: all)
INVENTOR:
   Patton, David Lynn, Eastman Kodak Company, 343 State Street, Rochester,
    New York 14650-2201, (US)
   Spoonhower, John P., Eastman Kodak Company, 343 State Street,
    Rochester, New York 14650-2201, (US
LEGAL REPRESENTATIVE:
  Haile, Helen Cynthia et al (60522), Kodak Limited Patent, W92-3A,
    Headstone Drive, Harrow, Middlesex HA1 4TY, (GB)
PATENT (CC, No, Kind, Date): EP 1321305 A2 030625 (Basic)
APPLICATION (CC, No, Date):
                             EP 2002080196 021209;
PRIORITY (CC, No, Date): US 27016 011221
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;
  IE; IT; LI; LU; MC; NL; PT; SE; SI; SK; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO
INTERNATIONAL PATENT CLASS: B41M-005/24; B44C-001/22
ABSTRACT WORD COUNT: 15
NOTE:
  Figure number on first page: 1
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS A (English)
                           200326
                                       217
                                      3590
                (English) 200326
      SPEC A
                                      3807
Total word count - document A
Total word count - document B
Total word count - documents A + B
                                      3807
```

Method for making gemstones with a unique micro discrete indicia INVENTOR:

Patton, David Lynn, Eastman Kodak Company ...

...US)

Spoonhower, John P., Eastman Kodak Company ...

...ABSTRACT A2

A method for providing and reading micro-discrete indicia on a gemstone using near-field optics.

...SPECIFICATION This invention relates a method and system for forming unique micro discrete indicia on a **gemstone** such as a **diamond** using near-field optical imaging.

Recent advances in optics provide for a method of exposure...

...than those produced by conventional optical systems and still be readable.

Optical means to mark diamonds and other gemstones have been previously described. Kaplan et al. in US Patent No. 6,211,484 Bl describe the use of a pulsed laser system and precision mechanical positioning controls to mark gemstones and a process to produce a secure certificate of authenticity. The laser in this instance...

...a micron. The laser exposure produces a series of ablated or graphitic spots on the **gemstone** surface.

Smith et al. in US Patent No. 6,187,213 Bl describe the use of an ultraviolet (UV) laser system for marking diamond. The use of the 193 nanometers exposure with conventional optical elements produces a mark that...

```
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
01437573
                                         for diagnosing attention deficit
Reducing
           noise
                   in
                        а
                            technique
    hyperactivity disorder
                                       Technik
                                                    der
                                                            Diagnose
                                                                         fur
Rauschverminderung
                        in
                               der
    Aufmerksamkeitsmangelstorung
Reduction du bruit dans une technique pour diagnostiquer des troubles
    deficitaires de l'attention
PATENT ASSIGNEE:
  EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York
    14650, (US), (Applicant designated States: all)
INVENTOR:
  Blazey, Richard N., Eastman Kodak Company, 343 State Street, Rochester,
    New York 14650-2201, (US)
   Patton, David L., Eastman Kodak Company, 343 State Street, Rochester,
    New York 14650-2201, (US)
  Parks, Peter A., Eastman Kodak Company, 343 State Street, Rochester, New
    York 14650-2201, (US
LEGAL REPRESENTATIVE:
  Gervasi, Gemma, Dr. (40516), Notarbartolo & Gervasi GmbH, Bavariaring 21,
    80336 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1221306 A2 020710 (Basic)
                              EP 1221306 A3 031119
APPLICATION (CC, No, Date):
                              EP 2001204771 011210;
PRIORITY (CC, No, Date): US 746052 001221
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: A61B-005/16; G06F-019/00
ABSTRACT WORD COUNT: 115
NOTE:
  Figure number on first page: 4A
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
                           Update
                                      Word Count
Available Text Language
                           200228
                                       143
      CLAIMS A
                (English)
      SPEC A
                (English)
                           200228
                                       3824
Total word count - document A
                                       3967
Total word count - document B
                                          0
Total word count - documents A + B
                                       3967
INVENTOR:
... US)
   Patton, David L ...
...SPECIFICATION been added to actual Mrange data for a subject. Fig. 10
  shows the original signal ( diamonds ), the signal with the modulation
  added (triangles) and the signal that would be extracted (X...
              (Item 4 from file: 348)
 20/3,K/4
DIALOG(R) File 348: EUROPEAN PATENTS
```

01436818

20/3,K/3

(Item 3 from file: 348)

Using image modification and temperature biofeedback to diagnose and treat

(c) 2005 European Patent Office. All rts. reserv.

```
Attention Deficit Hyperactivity Disorder (ADHD)
Diagnose und Behandlung von Hyperaktivitat mit Aufmerksamkeitsstorungen
    mittels Bildveranderung und Temperaturruckkopplung
Diagnostic et traitement du trouble deficitaire de l'attention avec
    hyperactivite a l'aide de modification d'images et de bioretroaction en
    temperature
PATENT ASSIGNEE:
  EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York
    14650, (US), (Applicant designated States: all)
INVENTOR:
   Patton, David L., Eastman Kodak Company, PLS, 343 State Street,
    Rochester, New York 14650-2201, (US)
  Blazey, Richard N., Eastman Kodak Company, PLS, 343 State Street,
    Rochester, New York 14650-2201, (US)
  Parks, Peter A., Eastman Kodak Company, PLS, 343 State Street, Rochester,
    New York 14650-2201, (US
LEGAL REPRESENTATIVE:
  Gervasi, Gemma, Dr. (40516), Notarbartolo & Gervasi GmbH, Bavariaring 21,
    80336 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1219233 A2
                                              020703 (Basic)
                              EP 1219233 A3 021211
APPLICATION (CC, No, Date):
                              EP 2001204822 011210;
PRIORITY (CC, No, Date): US 747216 001221
DESIGNATED STATES: CH; DE; FR; GB; IT; LI; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: A61B-005/00; A61B-005/16
ABSTRACT WORD COUNT: 73
NOTE:
  Figure number on first page: 2
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
               (English)
                           200227
                                       576
      CLAIMS A
      SPEC A
                (English)
                           200227
                                      3835
Total word count - document A
                                      4411
Total word count - document B
Total word count - documents A + B
                                      4411
INVENTOR:
   Patton, David L ...
... SPECIFICATION been added to actual Mrange data for a subject. Fig. 10
```

shows the original signal (diamonds), the signal with the modulation

added (triangles) and the signal that would be extracted (X...

```
(Item 1 from file: 348)
24/3,K/1
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
01275667
An automated gemstone evaluation system
Automatisches System zur Schatzung des Wertes eines Edelsteins
Systeme automatique pour evaluer les pierres gemmes
PATENT ASSIGNEE:
  Malnekoff, Peter J., (2877920), 5 South Wabash, Suite 1010, Chicago,
    Illinois 60603, (US), (Applicant designated States: all)
INVENTOR:
  Malnekoff, Peter J., 5 South Wabash, Suite 1010, Chicago, Illinois 60603,
    (US)
LEGAL REPRESENTATIVE:
  Molyneaux, Martyn William (34011), Langner Parry 52-54 High Holborn,
    London WC1V 6RR, (GB)
PATENT (CC, No, Kind, Date): EP 1096410 Al 010502 (Basic)
APPLICATION (CC, No, Date): EP 99308402 991025;
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: G06F-017/60
ABSTRACT WORD COUNT: 117
NOTE:
  Figure number on first page: 2
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                      Word Count
      CLAIMS A (English)
                           200118
                                       730
                (English) 200118
                                       2857
      SPEC A
Total word count - document A
                                       3587
Total word count - document B
                                          0
Total word count - documents A + B
                                       3587
... SPECIFICATION to be able to make an adjustment based on the particular
  lab generating the laboratory certificate for the gemstone .
    The automated gemstone evaluation system 10, when determining an
  adjustment factor 114, preferably takes into...
 24/3,K/2
              (Item 2 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
00992179
Process and device for marking gems and product obtained
Verfahren und Vorrichtung zum Markieren von Edelsteinen sowie dadurch
    erhaltene Erzeugnisse
Procede et dispositif pour marquer des pierres precieuses et produit ainsi
    obtenu
PATENT ASSIGNEE:
  Gemmindustria Gaia Ferrando S.p.A., (2475390), Via Larga, 31, 20122
    Milano, (IT), (applicant designated states:
    AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE)
INVENTOR:
```

Gaia, Mario, Via Plutone, 7, 20060 Cassina De' Pecchi, Milano, (IT)

Petruzziello, Aldo et al (59343), Racheli & C. S p A Viale San Michele

LEGAL REPRESENTATIVE:

del Carso, 4, 20144 Milano, (IT)

PATENT (CC, No, Kind, Date): EP 897021 Al 990217 (Basic)

APPLICATION (CC, No, Date): EP 98104223 980310;

PRIORITY (CC, No, Date): IT 97MI1888 970805

DESIGNATED STATES: AT; CH; DE; ES; FR; GB; LI

INTERNATIONAL PATENT CLASS: C23C-014/04; A44C-017/00; C30B-033/00;

ABSTRACT WORD COUNT: 83

LANGUAGE (Publication, Procedural, Application): English; English; Italian FULLTEXT AVAILABILITY:

Available Text Language Update Word Count

9907 CLAIMS A (English) 562 9907 1425 SPEC A (English)

Total word count - document A 1987 0

Total word count - document B 1987 Total word count - documents A + B

...SPECIFICATION the field of jewelry and gemmology there has long been a need to provide a certification for individual gems that is able to establish a reciprocal unique match between a certain gem and the relative certificate . At present gems are supplied with a certificate of quarantee which has no counterpart, however, on the particular...

24/3,K/3 (Item 3 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2005 European Patent Office. All rts. reserv.

00872069

LASER MARKING SYSTEM FOR GEMSTONES AND METHOD OF AUTHENTICATING MARKING LASERMARKIERUNGSSYSTEM FUR EDELSTEINE UND VERFAHREN ZUR AUTHENTIFIZIERUNG VON MARKIERUNGEN

SYSTEME DE MARQUAGE DE PIERRES PRECIEUSES PAR LASER ET PROCEDE D'AUTHENTIFICATION DE MARQUES

PATENT ASSIGNEE:

LAZARE KAPLAN INTERNATIONAL INC., (1699920), 529 Fifth Avenue, New York, NY 10017, (US), (Applicant designated States: all)

INVENTOR:

KAPLAN, George, R., 4 Robbins Roost, Rye Brook, NY 10573, (US) SHACHRAI, Avigdor, 6 Hadas Street, Ramat Poleg, 48091 Netanya, (IL) ANNER, Oded, 9/5 Nahlieli Street, Ganei Hasharon, 44026 Kfar-Saba, (IL) GURVICH, Leonid, 3/18 Sharira, 75381 Rishon Lezion, (IL) LEGAL REPRESENTATIVE:

Gornott, Dietmar, Dipl.-Ing. (46483), Zilleweg 29, 64291 Darmstadt, (DE) PATENT (CC, No, Kind, Date): EP 1021271 A1 000726 (Basic)

WO 9725177 970717

EP 96940506 961114; WO 96US18448 961114 APPLICATION (CC, No, Date): PRIORITY (CC, No, Date): US 9638 960105; US 690309 960730 DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: B23K-026/04; G06K-001/02 NOTE:

No A-document published by EPO

LANGUAGE (Publication, Procedural, Application): English; English; English

LASER MARKING SYSTEM FOR GEMSTONES AND METHOD OF AUTHENTICATING MARKING

24/3,K/4 (Item 4 from file: 348) DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2005 European Patent Office. All rts. reserv.

00572257

Method and apparatus of synthesizing diamond in vapor phase Verfahren und Vorrichtung zur Synthese von Diamanten aus der Dampfphase Procede et dispositif pour synthetiser le diamant en phase vapeur PATENT ASSIGNEE:

Sumitomo Electric Industries, Ltd., (279011), 5-33, Kitahama 4-chome, Chuo-ku, Osaka 541, (JP), (applicant designated states: DE;FR;GB) INVENTOR:

Ikegaya, Akihiko, c/o Itami Works of, Sumitomo Elec. Ind. Ltd., 1-1,
 Koyakita 1-chome, Itami-shi, Hyogo, (JP)

Fujimori, Naoji, c/o Itami Works of, Sumitomo Elec. Ind. Ltd., 1-1, Koyakita 1-chome, Itami-shi, Hyogo, (JP)
LEGAL REPRESENTATIVE:

Smith, Norman Ian et al (36041), F.J. CLEVELAND & COMPANY 40-43 Chancery Lane, London WC2A 1JQ, (GB)

PATENT (CC, No, Kind, Date): EP 564156 A1 931006 (Basic) EP 564156 B1 960703

APPLICATION (CC, No, Date): EP 93302263 930325;

PRIORITY (CC, No, Date): JP 92106016 920330

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: C23C-016/26; C23C-016/50; H05H-001/44;

ABSTRACT WORD COUNT: 221

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Update Word Count Available Text Language CLAIMS A (English) EPABF1 2547 (English) EPAB96 2004 CLAIMS B EPAB96 1835 CLAIMS B (German) CLAIMS B (French) EPAB96 2323 (English) EPABF1 13138 SPEC A SPEC B (English) EPAB96 13592 Total word count - document A 15686 Total word count - document B 19754 Total word count - documents A + B 35440

- ...SPECIFICATION of 5 inches. The diamond is superior in the uniformity of thickness. Raman scattering spectroscopy **certifies** that the **diamond** contains little impurities; non-diamond carbon ingredients. Embodiment 2 allows us to fabricate a wide...
- ...SPECIFICATION mm (5 inches). The diamond is superior in the uniformity of thickness. Raman scattering spectroscopy certifies that the diamond contains little impurities; non-diamond carbon ingredients. Embodiment 2 allows us to fabricate a wide...

24/3,K/5 (Item 5 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2005 European Patent Office. All rts. reserv.

00541879

Method and apparatus for synthesizing diamond in vapor phase. Verfahren und Vorrichtung zur Synthese von Diamanten aus der Dampfphase. Procede et dispositif pour synthetiser le diamant en phase vapeur. PATENT ASSIGNEE:

SUMITOMO ELECTRIC INDUSTRIES, LIMITED, (279014), 5-33, Kitahama 4-chome Chuo-ku, Osaka 541, (JP), (applicant designated states: DE;FR;GB)

```
INVENTOR:
  Ikegawa, Akihiko, Itami Works of Sumitomo, Electr. Ind. Ltd., 1-1
    Koyakita 1-chome, Itami-shi, Hyogo, (JP)
  Fujimori, Naoji, Itami Works of Sumitomo, Electr. Ind. Ltd.,
    Koyakita 1-chome, Itami-shi, Hyogo, (JP)
  Yoshikawa, Masanori, 3-25-16, Maruyamadai, Konan-ku, Yokohama-shi,
    Kanagawa-ken, (JP)
LEGAL REPRESENTATIVE:
  Smith, Norman Ian et al (36041), F.J. CLEVELAND & COMPANY 40-43 Chancery
    Lane, London WC2A 1JQ, (GB)
PATENT (CC, No, Kind, Date): EP 522842 A1
                                             930113 (Basic)
                              EP 522842 B1
                                             950920
                              EP 92306274 920708;
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): JP 91197109 910710; JP 91225100 910809
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: C30B-029/04; C30B-025/00; C23C-016/26;
ABSTRACT WORD COUNT: 174
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS B
               (English)
                           EPAB95
                                      1544
      CLAIMS B
                 (German)
                           EPAB95
                                      1402
      CLAIMS B
                 (French)
                           EPAB95
                                      1760
      SPEC B
                (English)
                          EPAB95
                                     11926
Total word count - document A
                                         n
                                     16632
Total word count - document B
Total word count - documents A + B
                                     16632
... SPECIFICATION mm (5 inches). The diamond is superior in the uniformity
  of thickness. Raman scattering spectroscopy certifies that the diamond
   contains little impurities; non-diamond carbon ingredients. Embodiment
  2 allows
              (Item 6 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
00420292
Diamond synthesizing apparatus.
Vorrichtung zur Synthese von Diamanten.
Appareil de synthese de diamant.
PATENT ASSIGNEE:
  SUMITOMO ELECTRIC INDUSTRIES, LTD., (279013), 5-33, Kitahama 4-chome,
    Chuo-ku, Osaka-shi, Osaka 541, (JP), (applicant designated states:
    DE; FR; GB; NL)
INVENTOR:
  Ota, Nobuhiro, c/o Itami Works of Sumitomo Elec., Industries, Ltd., 1-1,
    Koyakita 1-chome, Itami-shi, Hyogo, (JP)
  Fujimori, Naoji, c/o Itami Works of Sumitomo Elec., Industries, Ltd.,
    1-1, Koyakita 1-chome, Itami-shi, Hyogo, (JP)
LEGAL REPRESENTATIVE:
  Herrmann-Trentepohl, Werner, Dipl.-Ing. et al (5373), Patentanwalte
    Herrmann-Trentepohl, Kirschner, Grosse, Bockhorni & Partner
    Forstenrieder Allee 59, D-81476 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 418837 A1 910327 (Basic)
                              EP 418837 B1
                              EP 90117965 900918;
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): JP 89245748 890920; JP 90231650 900831
DESIGNATED STATES: DE; FR; GB; NL
```

```
ABSTRACT WORD COUNT: 182
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
                                       758
      CLAIMS B
               (English)
                           EPBBF1
                                       737
                           EPBBF1
      CLAIMS B
                 (German)
      CLAIMS B
                           EPBBF1
                                        957
                 (French)
      SPEC B
                (English)
                           EPBBF1
                                       3745
Total word count - document A
                                         0
                                       6197
Total word count - document B
                                       6197
Total word count - documents A + B
... SPECIFICATION cost.
  Description of the Background Art
    A technique for vapor-phase synthesizing diamond was started by
  Derjaquin (USSR Inv. Certif . No. 339134, 1958) in 1956 and by Eversole
  (USP Nos. 3030187 and 3030188) in 1958...
 24/3,K/7
            (Item 7 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
00391004
A diamond for a dresser
Diamant fur Abrichtungsvorrichtung
Diamant pour dispositif a dresser
PATENT ASSIGNEE:
  SUMITOMO ELECTRIC INDUSTRIES, LTD., (279013), 5-33, Kitahama 4-chome,
    Chuo-ku, Osaka-shi, Osaka 541, (JP), (applicant designated states:
    DE; FR; GB; NL)
INVENTOR:
  Satoh, Shuichi, c/o Itami Works, Sumitomo Electric Ind. Ltd., 1-1,
    Koyakita 1-chome, Itami-shi, Hyogo, (JP)
  Tsuji, Kazuwo, c/o Itami Works, Sumitomo Electric Ind. Ltd., 1-1,
    Koyakita 1-chome, Itami-shi, Hyogo, (JP)
  Yoshida, Akito, c/o Itami Works, Sumitomo Electric Ind. Ltd., 1-1,
    Koyakita 1-chome, Itami-shi, Hyogo, (JP)
  Urakawa, Nobuo, c/o Itami Works, Sumitomo Electric Ind. Ltd., 1-1,
    Koyakita 1-chome, Itami-shi, Hyogo, (JP)
LEGAL REPRESENTATIVE:
  Hansen, Bernd, Dr. Dipl.-Chem. et al (4921), Hoffmann Eitle, Patent- und
    Rechtsanwalte, Postfach 81 04 20, 81904 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 391418 A1
                                             901010 (Basic)
                              EP 391418 B1
                                             950125
APPLICATION (CC, No, Date):
                              EP 90106545 900405;
PRIORITY (CC, No, Date): JP 8988517 890406; JP 89277393 891025
DESIGNATED STATES: DE; FR; GB; NL
INTERNATIONAL PATENT CLASS: C30B-033/00
ABSTRACT WORD COUNT: 176
LANGUAGE (Publication, Procedural, Application): English; English
FULLTEXT AVAILABILITY:
                                     Word Count
Available Text Language
                           Update
                           9837
      CLAIMS B
                (English)
                                         49
                           9837
                                         54
      CLAIMS B
                 (German)
      CLAIMS B
                 (French)
                           9837
                                         50
                           9837
      SPEC B
                (English)
                                       4718
```

INTERNATIONAL PATENT CLASS: C01B-031/06; C30B-029/04;

Total word count - document A

Total word count - document B 4871 Total word count - documents A + B 4871

...SPECIFICATION small to handle and the quality is not sufficient for use as a wire drawing die .

These processes **certify** the linearity of the groove within 0.1 mm and the discrepancy of an angle...

24/3,K/8 (Item 8 from file: 349)

DIALOG(R) File 349: PCT FULLTEXT

(c) 2005 WIPO/Univentio. All rts. reserv.

00828044 **Image available**

METHOD AND SYSTEM FOR INTERNATIONAL E-COMMERCE

PROCEDE ET SYSTEME DESTINES AU COMMERCE ELECTRONIQUE INTERNATIONAL

Patent Applicant/Assignee:

E-GLOBAL NETWORK INC, 1990 N. California Boulevard, Suite 830, Walnut Creek, CA 94596, US, US (Residence), US (Nationality)

Inventor(s):

INGRAM Bradley Kent, 3336 Green Meadow Drive, Danville, CA 94506, US, RICARIO Jerry M, 7968 Tinaja Lane, San Diego, CA 92139, US,

Legal Representative:

ROGITZ John L (agent), Rogitz & Associates, 750 B Street, Suite 3120, San Diego, CA 92101, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200161586 A1 20010823 (WO 0161586)

Application: WO 2000US35676 20001228 (PCT/WO US0035676)

Priority Application: US 2000507183 20000218

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English Fulltext Word Count: 5480

Fulltext Availability:

Detailed Description

Detailed Description

... authenticated, "fail" can be returned at state 66; otherwise, the user is authenticated.

For users authenticated at decision diamond 64, the logic flows to block 68 to receive shipping information from the user. This...

24/3,K/9 (Item 9 from file: 349)

DIALOG(R) File 349: PCT FULLTEXT

(c) 2005 WIPO/Univentio. All rts. reserv.

00785490 **Image available**

INTERNET PROTOCOL MOBILITY ARCHITECTURE FRAMEWORK

```
CADRE D'ARCHITECTURE DE MOBILITE PAR PROTOCOLE INTERNET
Patent Applicant/Assignee:
  NORTEL NETWORKS LIMITED, World Trade Center of Montreal, 8th floor, 380
    St. Antoine Street West, Montreal, Quebec H2Y 3Y4, CA, CA (Residence),
    CA (Nationality)
Inventor(s):
  AKHTAR Haseeb, 3102 Pamela Place, Garland, TX 75044, US,
  OADDOURA Emad A, 1320 Wateredge Drive, Plano, TX 75093, US,
  BECKER Carey B, 1529 Faringdon Drive, Plano, TX 75075, US,
  PATIL Basavaraj B, 7616 Capella Court, Plano, TX 75025, US,
 BARNES March H, 3820 Hidden Trail, Flower Mound, TX 75028, US,
  WURCH Donald L, 3607 Highpoint Drive, Rockwall, TX 75078, US,
  COFFIN Russell C, 5608 Crowndale Drive, Plano, TX 75093-8500, US,
  ZHU Zemin, 3808 Neiman Road, Plano, TX 75025, US,
  TUMMALA Rambabu, 4324 Giovanni, Plano, TX 75024, US,
  NARAYANAN Raja, 1100 Meredith Lane #728, Plano, TX 75093, US,
  KHALIL Mohamed, 118 Briaroaks Street, Murphy, TX 75095, US,
  LE Liem Q, 1605 Meadowgate Drive, Richardson, TX 75081, US,
Patent and Priority Information (Country, Number, Date):
                        WO 200119050 A2-A3 20010315 (WO 0119050)
  Patent:
                        WO 2000IB1553 20000908 (PCT/WO IB0001553)
  Application:
  Priority Application: US 99152916 19990908; US 99156669 19990929; US
    99157289 19991001; US 99157449 19991004; US 2000192411 20000327; US
    2000657516 20000907
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE
  GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK
  MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 85222
Fulltext Availability:
  Claims
Claim
... a) an interface connectable to a visited NSF having a
  visited UDS configured for using Diamond
                                             Authentication ,
  Authorization, and Accounting (AAA) protocol to transmit
  to the server of the home UDS a...
               (Item 10 from file: 349)
 24/3,K/10
DIALOG(R) File 349: PCT FULLTEXT
(c) 2005 WIPO/Univentio. All rts. reserv.
```

(c) 2005 WIPO/Univentio. All rts. reserv.

00776516 **Image available**

PARSING A PACKET HEADER

ANALYSE D'UN EN-TETE DE PAQUET

Patent Applicant/Assignee:
 INTEL CORPORATION, 2200 Mission College Boulevard, Santa Clara, CA 95052,
 US, US (Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

ELZUR Uri, Hashomer Street 78, 30900 Zichron Yaakov, IL, IL (Residence), IL (Nationality), (Designated only for: US) Legal Representative: TROP Timothy N (agent), Trop, Pruner, Hu & Miles, P.C., Suite 100, 8554 Katy Freeway, Houston, TX 77024, US, Patent and Priority Information (Country, Number, Date): WO 200110096 A2-A3 20010208 (WO 0110096) WO 2000US16762 20000616 (PCT/WO US0016762) Application: Priority Application: US 99364096 19990730 Parent Application/Grant: Related by Continuation to: US 99364096 19990730 (CON) Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW (EA) AM AZ BY KG KZ MD RU TJ TM Publication Language: English Filing Language: English Fulltext Word Count: 7693 Fulltext Availability: Detailed Description Detailed Description ... receive parser 98 may determine if the packet needs authentication or decryption, as indicated in diamond 201. If authentication or encryption is needed, then the receive parser 98 may use the parsed information from... 24/3,K/11 (Item 11 from file: 349) DIALOG(R) File 349: PCT FULLTEXT (c) 2005 WIPO/Univentio. All rts. reserv. 00733700 **Image available** E-COMMERCE DEMAND AGGREGATION REGROUPEMENT DES DEMANDES DE COMMERCE ELECTRONIQUE Patent Applicant/Assignee: DEALTIME COM LTD, Hazoran Street 6, 42504 Netanya South Industrial Zone, IL, IL (Residence), IL (Nationality) DEALTIME COM LTD, 475 Fifth Avenue, New York, NY 10017, US, US (Residence), US (Nationality) Inventor(s): SHARFMAN Nahum, Hameyasdim Street 22, 37064 Karkur, IL ASHKENAZI Amir, 1 Kinds Park, Rye Brook, NY 10573, US Legal Representative: JOHNSON John M, Kaye, Scholer, Fierman, Hays & Handler, LLP, 425 Park Avenue, New York, NY 10022-3598, US Patent and Priority Information (Country, Number, Date): WO 200046687 A1 20000810 (WO 0046687) Patent: Application: WO 2000US2830 20000203 (PCT/WO US0002830) Priority Application: US 99118684 19990205; US 99390015 19990903

(Protection type is "patent" unless otherwise stated - for applications

Designated States:

```
prior to 2004)
  AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB
  GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA
  MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA
  UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 17470
Fulltext Availability:
  Detailed Description
Detailed Description
... customers 20, as depicted by the arrow labeled "NO" returning to box
  105 from decision diamond 107. Once the certified merchant 30 decides
  to make an offer of the product, good or service, the offer...
 24/3,K/12
               (Item 12 from file: 349)
DIALOG(R) File 349: PCT FULLTEXT
(c) 2005 WIPO/Univentio. All rts. reserv.
00733699
            **Image available**
E-COMMERCE NOTIFICATION
NOTIFICATION DE COMMERCE ELECTRONIQUE
Patent Applicant/Assignee:
  DEALTIME COM LTD, 6 Hazoran Street, Netanya South Industrial Zone, Israel
    42504, IL, IL (Residence), IL (Nationality)
  DEALTIME COM LTD, 475 Fifth Avenue, New York, NY 10017, US, US
    (Residence), -- (Nationality)
Inventor(s):
  SHARFMAN Nahum, 22 Hameyasdim Street, 37064 Karkur, IL,
  ASHKENAZI Amir, 1 Kinds Park, Rye Brook, NY 10573, US,
Legal Representative:
  JOHNSON John M (agent), Kaye, Scholer, Fierman, Hays & Handler, LLP, 425
    Park Avenue, New York, NY 10022-3598, US,
Patent and Priority Information (Country, Number, Date):
                        WO 200046686 A1 20000810 (WO 0046686)
  Patent:
                        WO 2000US2829 20000203 (PCT/WO US0002829)
  Application:
  Priority Application: US 99118684 19990205; US 99389969 19990903
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB
  GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA
  MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA
  UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 13523
```

Fulltext Availability: Detailed Description

Detailed Description ... customers 20, as depicted by the arrow labeled "NO" returning to box 105 from decision diamond 107. Once the certified0 merchant 30 decides to make an offer of the product, good or service, the offer... (Item 13 from file: 349) 24/3,K/13 DIALOG(R) File 349: PCT FULLTEXT (c) 2005 WIPO/Univentio. All rts. reserv. . **Image available** 00530538 METHOD AND ASSOCIATED APPARATUS FOR THE STANDARDIZED GRADING OF GEMSTONES PROCEDE ET DISPOSITIF PERMETTANT LE CLASSEMENT NORMALISE DES PIERRES **PRECIEUSES** Patent Applicant/Assignee: AGGARWAL Lalit K, Inventor(s): AGGARWAL Lalit K, Patent and Priority Information (Country, Number, Date): WO 9961890 A1 19991202 WO 99US11500 19990525 (PCT/WO US9911500) Application: Priority Application: US 9885797 19980528 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) BR CA IL IN JP US ZA AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT Publication Language: English Fulltext Word Count: 11550 Fulltext Availability: Detailed Description Detailed Description ... are utilized to identify it. The system is designed to evaluate multiple properties of a gemstone for authentication . Calculated weight from the apparatus can be compared to scale weight and refractive index of... 24/3,K/14 (Item 14 from file: 349) DIALOG(R) File 349: PCT FULLTEXT (c) 2005 WIPO/Univentio. All rts. reserv. 00388616 **Image available** OPTICAL TESTING SYSTEM FOR DISTINGUISHING A SILICON CARBIDE GEMSTONE FROM A DIAMOND SYSTEME OPTIQUE D'ESSAI DESTINE A DISTINGUER UNE PIERRE PRECIEUSE EN CARBURE DE SILICIUM D'UN DIAMANT Patent Applicant/Assignee: C3 INC, HUNTER Charles Eric, WALTZ Douglas G, Inventor(s): HUNTER Charles Eric, WALTZ Douglas G,

Patent and Priority Information (Country, Number, Date):

WO 9729359 A1 19970814

Patent:

```
WO 97US2244 19970212 (PCT/WO US9702244)
  Priority Application: US 96598564 19960212; US 97795228 19970210
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL
  IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT
  RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN YU KE LS MW SD SZ UG AM
  AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT
  SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 10218
Fulltext Availability:
  Detailed Description
Detailed Description
... industry still do not produce reliable results in distinguishing
  between the two materials. In fact.. certified gemstone
  appraisers are known to have mistakenly identified silicon
  carbide as diamond. The differences that...
 24/3,K/15
               (Item 15 from file: 349)
DIALOG(R) File 349: PCT FULLTEXT
(c) 2005 WIPO/Univentio. All rts. reserv.
            **Image available**
GEMSTONE REGISTRATION SYSTEM
SYSTEME D'ENREGISTREMENT DE PIERRES PRECIEUSES
Patent Applicant/Assignee:
  OMPHALOS RECOVERY SYSTEMS INC,
Inventor(s):
  VANIER Dana J,
  WALLNER Hermann F,
  LEYDON Michael,
Patent and Priority Information (Country, Number, Date):
                        WO 9717603 A1 19970515
  Patent:
                        WO 96CA731 19961107 (PCT/WO CA9600731)
  Application:
  Priority Application: CA 2162532 19951109
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AL AM AT AU AZ BB BG BR BY CH CN CZ DE DK EE ES FI GB GE HU IL IS JP KE
  KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE
  SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU
  TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI
  CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 5774
Fulltext Availability:
  Detailed Description
Detailed Description
... software and a counter. Associated with the
  personal computer is the printer 48 which prints gemstone
   certificates 50. In addition, the personal computer
  includes a modem 52 which communicates to a database...
```

```
24/3,K/16
               (Item 16 from file: 349)
DIALOG(R) File 349: PCT FULLTEXT
(c) 2005 WIPO/Univentio. All rts. reserv.
00368578
            **Image available**
SECURE INTERLINK RECEIVER FOR REMOTE PROGRAMMING OF WIRELESS TELEPHONES
            SUR D'INTERCONNEXION POUR LA PROGRAMMATION A DISTANCE DE
RECEPTEUR
    TELEPHONES SANS FIL
Patent Applicant/Assignee:
  McGREGOR Donald Scott,
  McGREGOR Travis Melchin, .
Inventor(s):
  McGREGOR Donald Scott,
  McGREGOR Travis Melchin,
Patent and Priority Information (Country, Number, Date):
                        WO 9708905 A1 19970306
  Patent:
                        WO 96US13999 19960829 (PCT/WO US9613999)
  Application:
  Priority Application: US 95521966 19950831
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AL AM AT AU AZ BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IS JP
  KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD
  SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD
  RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG
  CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 5547
Fulltext Availability:
  Detailed Description
Detailed Description
... the interlink
  receiver unit 14 and the phone data from the phone unit 18
  in diamond 77, The access authentication sub-routine is
  discussed with relation to Fig, 2C hereinafter,
  If the phone unit 12...
```

(Item 1 from file: 349) 26/3,K/1 DIALOG(R) File 349: PCT FULLTEXT (c) 2005 WIPO/Univentio. All rts. reserv. **Image available** MEDICAL LASER FIBER OPTIC CABLE HAVING IMPROVED TREATMENT INDICATORS FOR BPH SURGERY CABLE A FIBRES OPTIQUES LASER MEDICAL AYANT DES INDICATEURS DE TRAITEMENT AMELIORES EN TERMES DE CHIRURGIE BPH Patent Applicant/Assignee: ETHICON ENDO-SURGERY INC, 4545 Creek Road, Cincinnati, OH 45242, US, US (Residence), US (Nationality) Inventor(s): BARTON Scott, 776 Quailwoods Drive, Cincinnati, OH 45140, US, JANOFF Karen, 7487 Great Water Lane, West Chester, OH 45069, US, BAKOS Gregory, 6330 Redwood Court, Mason, OH 45140, US, Legal Representative: JOHNSON Philip S (et al) (agent), Johnson & Johnson, One Johnson & Johnson Plaza, New Brunswick, NJ 08933, US, Patent and Priority Information (Country, Number, Date): WO 200287457 A1 20021107 (WO 0287457) Patent: WO 2002US7682 20020315 (PCT/WO US0207682) Application: Priority Application: US 2001843203 20010426 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AU CA JP (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR Publication Language: English Filing Language: English Fulltext Word Count: 5358 Fulltext Availability: Detailed Description

Detailed Description

... formed in series along a single puncture site.

The markings are printed directly onto the optical fiber 28, so the spacing is well controlled. The area between the second primary mark... primary mark 102 to the third primary mark 103 is preferably about 10 mm. The diamonds, designated series of marks 108, 109, 111, 1129 113t 1149 115, and 116, provide a visual cue that the optical fiber 28 is deep.

Series of marks 108, 109, 1119 1129 1139 1149 115, and...

26/3,K/2 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2005 WIPO/Univentio. All rts. reserv.

00755459 **Image available**

IDENTIFICATION DEVICE

DISPOSITIF D'IDENTIFICATION

Patent Applicant/Assignee:

T I D (IDENTIFYING DIAMOND) LIMITED, c/o Phoebe Christodoulou Law Office, Vyronos Avenue, P. Lordos Center, 1st floor, Office 105, 3036 Limassol, CY, CY (Residence), CY (Nationality), (For all designated states except: US)

```
Patent Applicant/Inventor:
  REGEV Eyal, 63 Hahoresh Street, 46910 Kfar Shmaryahu, IL, IL (Residence),
    IL (Nationality), (Designated only for: US)
Legal Representative:
  COLB Sanford T, Sanford, T. Colb & Co., P.O. Box 2273, 76122 Rehovot, IL
Patent and Priority Information (Country, Number, Date):
                        WO 200068870 A1 20001116 (WO 0068870)
                        WO 2000IL253 20000503 (PCT/WO IL0000253)
  Application:
  Priority Application: US 99304853 19990505; US 99407977 19990929
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES
  FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU
  LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
  TZ UA UG US UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 3837
Fulltext Availability:
  Claims
     9 The jewelry piece (10) according to claim 8 wherein said
  identification data (22) are optically detectable.
  -(01) I@jjamofogj
  jo lainjoignurtu P jo ss3lppu pup '(0 1) 300id kijaAm) f...
...search terms used)
  USPAT, DERWENT, EPO, JPO
  search terms: gem, gemstone, jewelry, jewel, precious stone, diamond,
  ring, id , identification, embed, recess, insert, inscribe ,
  engrave, etch
  C. DOCUMENTS CONSIDERED TO BE RELEVANT
  Category* Citation of document, with indication, where appropriate, of...
 26/3,K/3
              (Item 3 from file: 349)
DIALOG(R) File 349: PCT FULLTEXT
(c) 2005 WIPO/Univentio. All rts. reserv.
            **Image available**
SYSTEM AND METHOD FOR REGISTER MARK RECOGNITION
SYSTEME ET PROCEDE DE RECONNAISSANCE DE MARQUES DE REPERE
Patent Applicant/Assignee:
  CC1 INC,
  LEWIS Clarence A Jr,
  LEWIS Richard Dale,
  LEWIS James Edward,
Inventor(s):
  LEWIS Clarence A Jr,
  LEWIS Richard Dale,
  LEWIS James Edward,
Patent and Priority Information (Country, Number, Date):
                        WO 200027638 A1 20000518 (WO 0027638)
  Patent:
                        WO 99US24045 19991022 (PCT/WO US9924045)
  Application:
```

Priority Application: US 98105456 19981023

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ CZ DE DE DK DK DM EE EE ES FI FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English Fulltext Word Count: 47899

Fulltext Availability: Detailed Description

Detailed Description
... center of the
registration marks.

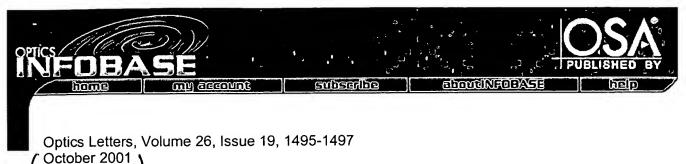
Note, however, that Sainio only claims the use of photo- optical line scanner sensors (using a tungsten halogen lamp as the illumination source) and does not to operate properly. Sainio's specific mention of diamond -shaped registration marks is designed in fact to aid this process and provide a method of overcoming inherent deficiencies in...

?

Home: Introduction | How to Buy a Diamond | Diamond Grading Reports
GIA Mission Statement | News and Info | Back to eBay™

Unauthorized use of and/or copying of this material is strictly prohibited. This page is the sole property of the Gemological Institute of America (GIA). Nothing may be reproduced without GIA's express written permission. The information on this page is provided by GIA as a public service and in fulfillment of its nonprofit mission to secure consumer confidence through the dissemination of knowledge. GIA does not endorse or recommend any commercial product, organization or any individual, including organizations or individuals with Web sites that may offer a link to information authored or copyrighted by GIA, eBay and the eBay logo are trademarks of eBay, Inc.

©2001 Gemological Institute of America Inc.



Micromachining of diamond with a near-field scanning optical microscope

Igor I. Smolyaninov, ChristopherC. Davis

Keywords (OCIS):

(180.5810) Microscopy: Scanning microscopy

(220.1920) Optical design and fabrication: Diamond machining

ABSTRACT

Direct-write laser micromachining of diamond on a submicrometer scale with a near-field scanning optical microscope with an uncoated tapered fiber tip has been demonstrated. Micromachined structures can be imaged in situ immediately after modification of the sample. An early stage of the ablation process, which is believed to be conversion of diamond into graphite, has been visualized. [Optical Society of America]

download pdf (1155 KB)

References

- 1. T. Shibata, New Diamond Frontier Carbon Technol., 10, 161, 2000
- 2. J. K. Park, V. M. Ayres, J. Asmussen, and K. Mukherjee, Diamond Relat. Mater., 9, 1154, 2000
- 3. P. E. Russell, T. J. Stark, D. P. Griffis, J. R. Phillips, and K. F. Jarausch, J. Vac. Sci. Technol. B, 16, 2494, 1998
- 4. Y. Sakamoto, M. Takaya, H. Sugimura, O. Takai, and N. Nakagiri, Appl. Phys. Lett., 73, 1913, 1998
- 5. D. Courjon, eds., in Near-Field Optics, Kluwer, Dordrecht, 1993
- 6. I. I. Smolyaninov, D. L. Mazzoni, and C. C. Davis, Appl. Phys. Lett., 67, 3859, 1995

MY ACCOUNT | ABOUT INFOBASE | SUBSCRIBE | HELP | OSA.ORG | HOME

COPYRIGHT © 2005 OPTICSINFOBASE.ORG



Web Images Groups News Froogle Local more »

diamond identification etch logo

Search Advanced Search Preferences

Web

Results 1 - 10 of about 6,380 for diamond identification etch logo. (0.27 seconds)

GIA Dossier - Laser Etching: DiamondRing.com

DiamondRing.com **Logo** spacer ... Laser Inscriptions Inside the **Diamond**: Some GIA Notes, barry, **Diamond** Education, 1, 12-06-04 07:40 PM ... www.diamondtalk.com/forums/ t2443-giadossierlaseretching.html - 74k - Cached - Similar pages

Detroit Name Plate Etching Co., Inc.: Products

DNPE manufactures quality metal **identification** products including serial and model ... **Logo**/Model/Serial Plates Machinery/Control Panels Scales & Dials ... www.dnpe.com/products.htm - 14k - <u>Cached</u> - <u>Similar pages</u>

GIA: EBay Microsite

Guide to the New Generation GIA **Diamond** Grading Report ... a micro-laser beam is used to **etch** a microscopic inscription on the girdle of **diamonds** weighing ... www.gia.edu/microsite/1462/**diamond**_grading_reports.cfm - 26k - Cached - Similar pages

Nanodot: Nanotechnology News and Discussion » Blog Archive » UPC ... We can also use the same type of micro-lasers used by diamond jewelers to etch identification numbers in their diamonds, to etch UPCs on individual shotgun ... new.foresight.org/nanodot/?p=1879 - 25k - Cached - Similar pages

Golf Bag Tags: Golf Bag Tags, Luggage Tags - imprintgolf.com.

Golf Bag Tags for Logo Golf Bags, Logo Golf Items and Golfer Equipment Online - imprintgolf.com. ... Description: Bag Tag, Ig diamond 4" * 5 3/8" ...

www.imprintgolf.com/bagtag page.htm - 96k - Cached - Similar pages

Inland **Diamond** Tip Set User Instructions

Some other examples of uses for **diamond** tips include:. You can **etch** a design ... Use the tips to sign your work or engrave **identification** into valuables. ... www.inlandcraft.com/Uguides/UGtipset.htm - 10k - <u>Cached</u> - <u>Similar pages</u>

Regal Imports - News

... will subsequently laser-etch their own brand name or logo onto the stones. ... If the diamond is over .18 cts, it will have a a diamond identification ... www.regalimportsltd.com/news.htm - 55k - Cached - Similar pages

Engraving and Laser Marking Services - UK (England, Scotland ...

R. Denny offers the very latest technology in CNC routing, **diamond** polishing, ... Direct part marking on steel, aluminium, plastic or **identification** of tags ... www.kellysearch.co.uk/gb-product-778.html - 47k - Jun 13, 2005 - <u>Cached</u> - <u>Similar pages</u>

The INFRASTRUCTURE Semiconductor Equipment & Material Company ... (STI) is primarily a manufacturer and distributor of **diamond** cutting tools used by the ... The stations may also be used for various **etch** and photo strip ... www.infras.com/codatabase/semiequR-Z.htm - 20k - <u>Cached</u> - <u>Similar pages</u>

<u>Custom Awards- Logo Specialized Promotional Printed Imprinted ...</u>
Buy Custom Awards-Custom Logo Awards-Specialized Awards-Custom Promotional ... To see all the Awards in the Identification Line Online Catalog at Sun-Rise. ...
www.sun-rise.com/newDir/custom-Awards.asp - 177k - <u>Cached</u> - <u>Similar pages</u>

Sponsored Links

Diamond Tester

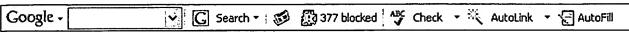
Effective jewelry tool to identify diamonds, high quality at low price www.sinoweel.com/

Logo design Choose a logo already made for you! www.selectlogo.com

G00000000008 le > 1 2 3 4 5 6 7 8 9 10 Next

Next Result Page:

Free! Get the Google Toolbar. Download Now - About Toolbar



diamond identification etch logo

Google Home - Advertising Programs - Business Solutions - About Google ©2005 Google

Search within results | Language Tools | Search Tips | Dissatisfied? Help us improve